THE AMERICAN ENGINEER

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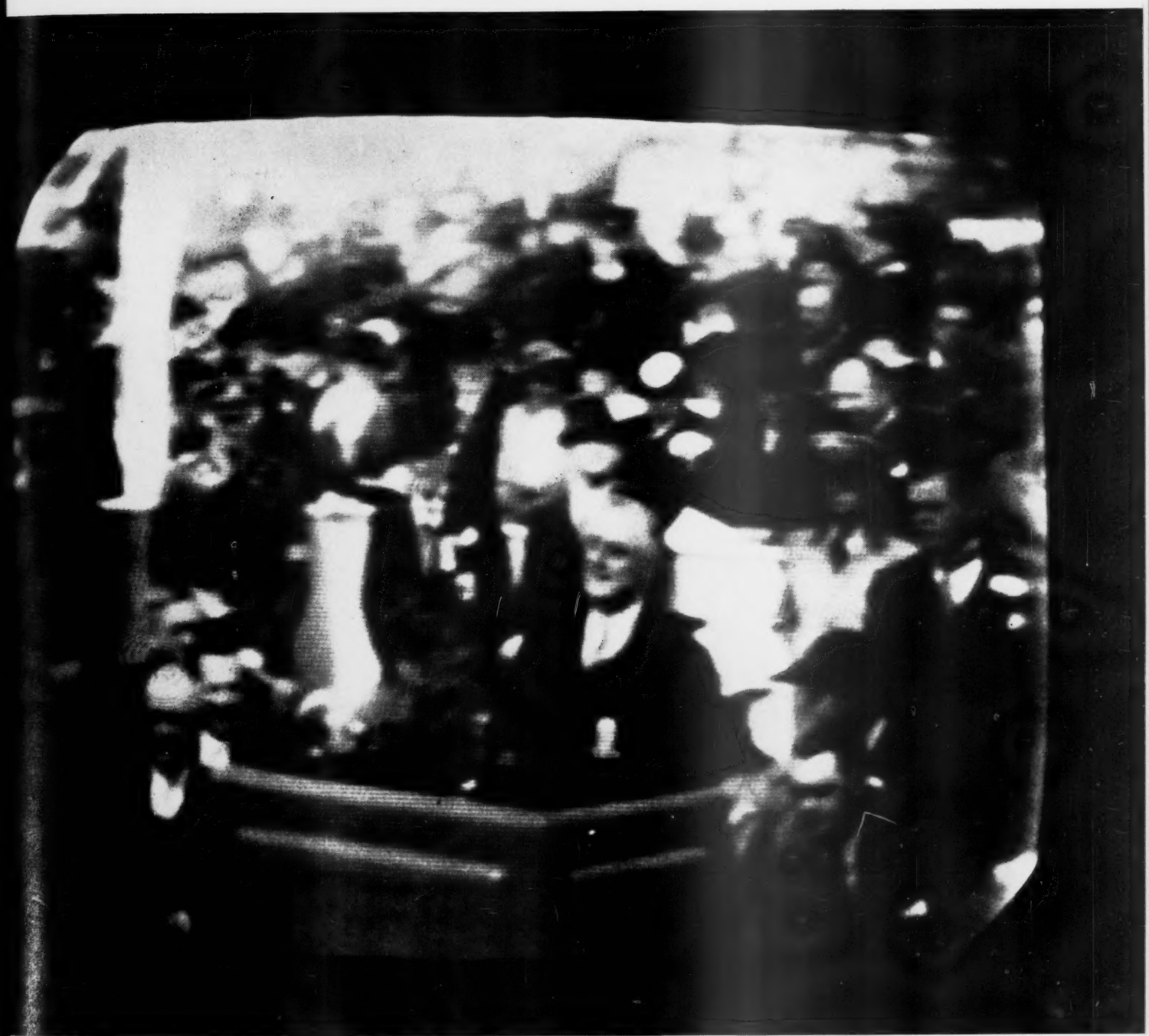

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CONTENTS

Editorial 2
National Society News 3
Jack Dempsey Scores Another Victory 4
The Man We Don't Know 5
Planning and the Professional Engineer 7
The Professional Engineers' Answer to Unionization 8
Editorial Comment 10
New York State Society Has Annual Spring Meeting 11
News of State Societies 13

THE COVER *Photo by Acme Newspictures Inc.*

We are attempting to record on our covers events of world interest, from political, social, scientific, and economic standpoints. This month's cover is a reproduction of a television photograph of President Franklin D. Roosevelt taken April 30, 1939, when the first major television broadcast was inaugurated, on the occasion of the formal opening of the New York World's Fair.

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EDITORIAL • • •

PUBLIC WORKS

Among resolutions passed by the National Society of Professional Engineers is one endorsing a unified Department of Public Works. We quote:

> "WHEREAS, the prosecution of Federal Public Works is at present planned and directed by numerous agencies; and,
>
> WHEREAS, the best interests of the nation indicate the necessity for a comprehensive control that could be equated with the needs, economic and otherwise, of all engineering projects other than those within the jurisdiction of military authorities; and,
>
> WHEREAS, it is the opinion of the engineering profession that the existence of a single agency competent to develop and execute a long range plan of public works would tend to minimize the effects of economic upheavals,
>
> NOW THEREFORE BE IT RESOLVED, That the NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS does petition the President and The Congress of the United States to establish a cabinet post to be known as the Secretary of Public Works; and be it further
>
> RESOLVED, That it is the opinion of the Society that public welfare requires that such post should be filled by a registered professional engineer."

A committee of the national society was appointed for the purpose of promoting the objective stated in the resolution. Members of that committee are:

Chairman: Col. M. E. Gilmore, Regional Administrator P. W. A., 2 Lafayette St., New York City.

Members: D. B. Steinman, Consulting Engineer, Past President N. S. P. E., 117 Liberty St., New York City. Col. W. C. Bickford, Consulting Engineer, Vice President N. S. P. E., P. O. Box 1878, Seattle, Wash. Spencer C. Hamilton, Jr., President New Jersey Association of Professional Engineers, 231 Washington Ave., Glen Ridge, N. J. Don A. MacCrea, Consulting Engineer, President Arkansas Society Professional Engineers 342 Gazette Bldg., Little Rock, Ark. Capt. J. W. Beretta, Consulting Engineer, Vice President N. S. P. E., Nat. Bank of Commerce Bldg., San Antonio, Texas.

There are before the Congress of the United States at present several bills intended to establish a Department of Public Works. The re-organization of the Federal Government is a subject ordinarily considered by each President and by each Congress, and usually the difficulties are insurmountable.

The engineering profession, as represented by the National Society of Professional Engineers, has expressed itself as desiring all public works other than those primarily for national defense, to be under the "comprehensive control" of a single Public Works Department, and headed by a qualified registered professional engineer. The New York State Society recently sent to each of its forty-three Congressmen and its two Senators letters endorsing the Starnes Bill. There may be other proposed Acts which would meet with our Society's endorsement.

Our National Society has been lending its aid in the interest of our Public Works Department resolution.

It is evident that under the long established system of Federal Bureaus in which Public Works of one type or another have been constructed efficiently, advocates of the existing system will be loath to surrender their present functions.

As a national organization made up of State units, the several units look to the National Society's committee for leadership. It is properly the function of the National Society to endorse or disapprove of proper legislation and, at the same time, inform the several State societies of its action. The state groups then have a leadership which they may properly desire to follow.

Recent authority granted by Congress to the President to reorganize several branches of government is a step in the general direction toward our objective, and it is to be hoped that sooner or later, in addition to the present emergency social agencies which are heading toward a single Public Works Department, the permanent agencies may soon be included.

When our national committees make recommendations to us as individual state societies, let us act rapidly and positively,—though, of course, deciding for ourselves.

ROBERT HALL CRAIG
Editor

NATIONAL SOCIETY NEWS

NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS
Washington, D. C.
National Press Building

MEMORANDUM
From: N.S.P.E.
To: Members

Enclosed please find your membership card for 1939.

It is planned to build the membership in N.S.P.E. to at least 10,000 during the current year, and this can be done with the cooperation and assistance of every member of N.S.P.E.

Won't you please help your membership committee by handing the enclosed sales letter to a fellow engineer who is not as yet affiliated with this movement, and invite him to attend your next chapter or State meeting as your guest.

Fellow Engineer:

The engineer who handed you this memorandum is a member of this Society and will be glad to place you in contact with the officers of his county chapter or State society in order that you may become acquainted with your fellow engineers and know of the many worth while accomplishments of this organization.

The society restricts its membership to licensed professional engineers in the forty States and four U. S. Possessions having professional engineers license laws and to engineers having equivalent qualifications in states not yet having such laws.

Some of the Society's accomplishments are:

Promoting and assisting in the enactment of professional engineers license laws. Twenty-seven states had such laws when N. S. P. E. was organized. Now they are in effect in forty States and four U. S. possessions.

Cooperating in enforcement of professional engineers' license laws, even to the extent of court action, thus rendering to society the type of service it has a right to expect from the profession.

Correcting violations of the code of ethics and exposing unethical competition.

Adopting schedules of classification, fees and salaries for professional engineers. Promoting merit systems and cooperating with civil service agencies.

Educating the engineer as well as the public and governmental agencies as to the engineer's place in society.

Advising prospective engineering students and educators as to the unemployment conditions as well as the requirements which will have to be met after graduation.

Promoting change in Labor Relations Act in order that the professional men will not be dictated to by the labor organizations.

There are many other worth while accomplishments which will be explained to you further if you attend a future county or State society meeting, and you may be assured you will be a welcome guest of your fellow engineers. The engineer who handed you this will be glad to tell you when and where the next meeting will be held in your locality.

For the Membership Committee,
By W. S. CONLON, *Executive Secretary*

JACK DEMPSEY SCORES ANOTHER VICTORY

Unlicensed Architect Loses Decision to Jack Dempsey

A decision of significance to the professions has just been handed down in the New York Supreme Court—Special Term, Part V, by Mr. Justice Rosenman in the case of the American Store Equipment & Construction Corporation vs. Jack Dempsey's Punch Bowl, Inc. et al. This was an action to recover compensation for services rendered, including designing, arranging, and decorating, in addition to the architectural services of preparing plans and supervising construction. Since the plaintiff is not licensed as an architect and, being a corporation, could not in fact be licensed, judgment was rendered for the defendants. (The decision in full is recorded in the New York Law Journal, May 4, 1939, page 2055).

The following are especially significant items of the Court's ruling:

1. An agreement by one who is not licensed to perform services requiring a license according to statute "is of such illegality that public policy will actually ban any recovery thereon even though the unlicensed party has performed the services undertaken."

2. The provisions of the licensing law were promulgated "to safeguard life, health and property."

3. The pertinent provisions in the Architects, and Engineers' licensing laws are almost identical.

4. A similar prior decision under the Engineers' law in New York State is cited as a precedent. (Dinan Co., vs. Slater; 132 Mis., 454, affirmed 225 Appellate Division, 750). "The same principles are applicable to architectural services; for both professions involve the safety and lives of the general public who use their structures. Consequently, plaintiff here cannot recover, for it cannot show compliance with the architectural licensing statutes."

5. The claim that only 5 or 10 percent of the services undertaken to be rendered were illegal does not permit recovery for all those portions of the contract not involving professional services. The established rule is that "if any part of the consideration for his contract was contrary to public policy, the whole promise fails." Where part of an integral contract is illegal, "there can be no separation of acts to support proportional recovery."

6. "To sustain the legality of the balance of the agreements would lead to widespread disregard of the licensing statutes. It would be easy for any construction contractor to thwart the purposes for which the licensing of architects was enacted by merely providing in his contract that architectural services would be given gratis, so long as the contractor were awarded the contract itself."

7. "One instance of rendering such services is sufficient to bring a person within the category of practicing architecture. It is not necessary, under this provision, that a person make a regular business of performing similar services before he is obligated to comply with the licensing sections."

8. The principles and precedents with respect to the effect of statutory licensing provisions upon actions for compensation for services rendered by unlicensed plaintiffs have also been recorded by the same Court in another recent decision. (Shorten vs. Milbank et al., N. Y. Law Journal, March 2, 1939, page 976, affirmed by the Appellate Division April 28, 1939.)

—By D. B. STEINMAN.

SUPREME COURT - Special Term

Part V.

By Mr. Justice ROSENMAN

Am. Store Equipment & Const. Corp'n v. Jack Dempsey's Punch Bowl, Inc. et al.—The principles and precedents with respect to the effect of statutory licensing provisions upon actions for compensation for services rendered by unlicensed plaintiffs have been discussed by me in Shorten v. Milbank et al. (N. Y. L. J., March 2, 1939, p. 976, aff'd App. Div. April 28, 1939). The question to be determined is whether an agreement by one who is not licensed but who should be licensed according to statute is merely malum prohibitum so that a recovery thereon may be permitted; or whether it is of such illegality that public policy will actually ban any recovery thereon even though the unlicensed party has performed the services undertaken.

It is conceded that plaintiff here has so license as an architect. It could not, in fact, be licensed (subd. 2, sec. 1476, Education Law) The provisions of the Education Law relative to licensing of architects were promulgated "to safeguard life, health and property" (subd. 1, sec. 1476, Education Law). In principle, too "any professional service such as consultation * * * planning design, including aesthetic and structural design or responsible supervision of construction, in connection with any private or public buildings, * * * or the equipment or utilities thereof, or accessories thereto * * *" (subdiv. 6, sec. 1475, Education Law) necessarily involves, at least to some extent, the safeguarding of life, health or property. Such were a substantial portion of the services required by the contracts to be performed by the plaintiff. Though there were other services to be rendered, such as designing, arranging and decorating, there were also the preparation of plans and the supervision of construction work which are the usual functions of an architect.

Subdivision 1 of section 1476 and subdivision 6 of section 1475 of the Education Law are almost identical respectively with the first portion of section 1450 and subdivision 6 of section 1449 thereof. It has already been held judicially (Dinan Co., Inc., v. Slater; 132 Mis., 454, aff'd 225 App. Div., 750) that compliance with section 1450 was a necessary requisite to a recovery for engineering services. (That case was decided upon the statute as enacted in 1927; but there has been little change in the section as it reads to-day). The same principles are applicable to architectural services; for both professions involve the safety and lives of the general public who use their structures. Consequently, plaintiff here cannot recover, for it cannot show compliance with the architectural licensing statutes.

The plaintiff contends, however, that even if it did perform certain architectural services, neverthless it can recover for all those portions of the contract not involving such services, and that the architectural services, if any amount only to about 5% or 10% of all the services undertaken to be rendered. However, there is no means of segregating the good from the bad portions of the contract in this case. The contract was entire and indivisible; to plan, contract and furnish a complete unit. If the plaintiff had sold the interior furnishings and decorations, the contract could have been separated at least to the extent of permitting recovery for the merchandise sold. Here, however, were only services, ideas and supervision. They cannot be separated into different classes—legal and illegal.

The general rule still persists that "if any part of the consideration for his contract was contrary to public policy, the whole promise fails" (Metz v. Woodward-Brown Realty Co., 182 App. Div. 60, 65). Where, as here, the "defendant's promise arose out of and is indissolubly linked with plaintiff's illegal bargain" (Sturm v. Truby, 245 App. Div. 357, 360), there can be no separation of acts to support proportional recovery.

To sustain the legality of the balance of the agreements would lead to widespread disregard of the licensing statutes. It would be easy for any construction contractor to thwart the purposes for which the licensing of architects was enacted by merely providing in his contract that architectural services would be given gratis, so long as the contractor were awarded the contract itself.

Another contention of the plaintiff is that it is not generally engaged in the practice of architecure. Subdivision 6 of section 1475 of the Education Law, however, provides that "a person practices architecture within the meaning and intent of this article, who * * * does perform any professional service such as * * * are called for by these agreements. One instance of rendering such services is sufficient to bring a person within the category of practicing architecture. It is not necessary, under this provision, that a person make a regular business of performing similar services before he is obligated to comply with the licensing sections.

Judgment for defendants. Thirty days' stay and sixty days to make a case.

Morrison v. City of N. Y. et al.—Decision and judgment signed.

The Man We Don't Know

By John J. Caton, Director, Chrysler Institute of Engineering

President Keene, members of the faculty, graduating class, students, and friends of Indiana Tech:

On numerous occasions, I have been signally honored by being permitted to address the graduates and friends of Indiana Tech. This evening I appear before you as an humble teacher to receive the first honorary degree ever conferred by your college. In the forty years of my life devoted to education and industry, may I say with all sincerity, the degree I am about to have conferred upon me this evening causes to well up in my heart more fond memories of the "days that have been," than any degree earned, or conferred upon me in the past.

I have many reasons to feel this way. First, your school is just starting from a very humble beginning. So did I. Students about to receive their degrees tonight and those who will receive them in the future all come from the humble walks of life. I did also. The schools of the nation that stand out as giants in the field of education every one without exception, had their beginning not unlike Indiana College of Technology. Every oak tree which shelters the birds of the air and stands etched against the sky like cathedral spires was given its life by Mother Earth from a tiny acorn.

Tonight I shall address myself, first, to the faculty, Indiana Tech's honored President, and its Board of Directors; secondly, to those young men who are about to find their way in this disordered world that needs "more of their kind." Then, too, I wish to pay a tribute to the student body as a whole, the aims and aspirations of your Alma Mater, and particularly to the undergraduates; and, lastly, to the friends and visitors present this evening, many of whom have never had the opportunity afforded them as is being afforded to you graduates this evening.

I have chosen for the topic of my address "The Man We Don't Know." The man we don't know is the engineer; the chap who belongs to that rare class of men who are possessed of the simplicity to wonder, the ability to question, the power to generalize and the capacity to apply. "He is the most misunderstood professional man in all of the professions." Benjamin Franklin said this more than a century ago. It is just as true now as in Franklin's day. I may say some things tonight which will rest upon some of your ears as heretical; if not, then seemingly unethical. For after all, it is the fundamental premise of ethics that if a thing be really ethical in one period it must remain so in the periods which follow. Ethics do not change but humans do, particularly the words which humans use to express their thoughts, until finally in one common language we seem to boil down ethics to mean "common sense."

It was the common sense of the ancients when they visualized the sun being born around the earth on the backs of angels. Later, we were told that the early Egyptians visualized the earth as a rectangular body surrounded by a vast sea, and the sun was carried around in an immense boat. This was common sense in their respective day.

Now, let us come down the ages to within the time in which we "elders" can reach back and touch the time of Kepler's day. Now Kepler taught (and he came quite near to identifying our solar system) that the planetary system was composed of the sun which acted as the "hub" of a wheel and out of this "hub" radiated spokes. On the radial ends of these were permanently fixed the planets now identified as our solar system. They all rotated in direct relation to the motion of the "hub" which was the sun. Kepler did not visualize that each individual planet had its own rotary motion as well as its planetary one. This was common sense in his day. The man of the "street" refers to it as "horse sense," but who wants to be a horse?

From now on I shall call a spade a spade and hope at least to clarify all indictments as far as it is humanly possible to do so. Abe Martin in his classical nonsense has said that nothing upsets an argument better than facts. When one leaves logic and facts out of an argument, there is nothing logical upon which to premise the thought. To the President, Board of Directors, and Faculty of Indiana Tech, I have nothing but admiration and praise to extend for the outstanding work you are doing here. But this is not your fault. It is because the Conference of Colleges, which directs the destiny of all higher education regardless of where it is taught in the United States or Canada, would not permit you to do otherwise. One offtimes hears the expression, "If I had attended such and such a college, how much better a lawyer (or doctor, or preacher, or engineer) I would have been." What folly! Those who make such remarks are not conversant with the laws governing higher education, in which that sacred thing called a degree is involved.

The Conference of Colleges and the North Central Association direct the destiny of all higher education whether it is law, medicine, engineering, or liberal arts. They dictate what shall be taught; what shall be classified as fundamentals, and what shall not; and the number of hours these subjects called fundamentals shall be taught. That is why, in engineering, we are required to acquire a total of 142 semester hours in order to receive a degree and certain fundamental subjects must have been taught us. One hundred and forty-one semester hours will not suffice, neither can any school remove from its curriculum one fundamental subject which has been set down by the Conference of Colleges. This is as it should be if we hope to complete our higher education unified.

If one were debating the question, he might may, "Well, perhaps if I had attended such and such a school, they might have taught me more engineering subjects which involved a greater number of semester hours."

Now, folks, a semester hour is a subject one hour a week for 18 weeks; and you will find, if you apply a pencil to the multiplication table, that you cannot acquire more that 142 such hours in any four year school period. So the argument is settled from that point, but now someone else asks, "Do they not have more equipment in some schools than others?" Yes, some do; but invariably they have very little use for them because after all, all a college of engineering, law, or medicine can do for one is to teach the fundamentals of that profession. They have neither time nor inclination to do otherwise. Specialists cannot be developed in colleges of engineering any more than medical specialists can be developed in their respective colleges of medicine. The medical profession recognized a generation ago that all a young man leaving a college of medicine had to recommend him was a handful of medical fundamentals that he could not even apply; so later they insisted that these young men must spend two years as an interne in some accredited hospital, applying the fundamentals they had learned under the supervision of qaulified physicians. They recognize the fact, too, that no human being could live long enough to acquire all the known truths about the

human anatomy in order to prescribe for it successfully. When one visited the physician of that day and complained to him of a distress in the chest, one usually informed the doctor that one felt one had indigestion. Now, the physician set the patient in a chair and with that suave manner of his profession went over him carefully. And, perhaps, because of his knowledge of humans made the patient feel better before he had even administered any opiate. Now, after treating him for indigestion for a time, he may find that the patient does not respond to this treatment. Then suspicioning that something else is wrong, what it is he may not know, he suggests that he be permitted to bring in Doctor Greene. Let us identify Dr. Greene as a stomach specialist. Dr. Greene can discuss the human anatomy intelligently with any other physician, but he makes no attempt to prescribe for the patient until he has examined him. Suppose Dr. Greene's diagnosis reveals the patient to be suffering with cancer of the stomach. Now, folks, cancer of the stomach and indigestion are not even opposite ends of the same stitch; and if the patient had died, of which there is no doubt, the death certificate would have carried this: "Acute Indigestion."

Another young interne in the hospital may find that the treatment of human eyes is receptive to him. His success is better; it is better primarily, because, things more receptive to us are more easily understood. Hence he leaves the hospital and becomes an eye specialist. Now isn't it reasonable to suppose that before this physician passes on to his Maker, he can pass back to his profession more known truths about the human eyes than was ever known in the history of medicine?

Yes, some colleges do have more laboratory equipment than others. Now, if a college of engineering was brought up to the minute in equipment, it would cost more than the building which housed it; and four years from that date the same equipment would be as obsolete as the one horse shay. I could teach more and better thermodyamics with an old single cylinder reciprocating steam engine of the vintage of 1900 than could be taught through the medium of an up-to-date tripple expansion job. Why? Because in the up-to-date job, all the variables and unknowns are solved for the student mechanically while in the former he must solve for them mathematically. And it is thermodynamics we are teaching the young engineer through a system of mathematics, and not by mechanical equations. Mechanical equations might be all right if it were not for the fact that the engineer who designed the up-to-date job was required to know his thermodynamics mathematically and not mechanically. Therefore, I promise this argument with you that the small school can teach the fundamentals of any profession just as well as the large school. The smaller school sometimes does the better job of it because in it the human equation can be given more immediate professorial attention. Here the weaknesses in a student are discovered. There is more time to pull the human out of the slump rather than "condition" him upon examination day, advising him *not* to re-register the next semester. Now, you young men who are leaving Indiana Tech, as neophytes in engineering, let me, as a new alumnus, attempt to chart your way.

In the olden days, seafaring was very hazardous. The highways and by-ways of the seas were yet uncharted. The mariners had only the stars by night and the sun by day to guide them. There were no beacon lights on the distant shores, but there were shoals and hidden rocks everywhere upon the way waiting like some unseen monster to swallow its unsuspecting victims. Today all this has changed. Seas are charted, beacons, buoys, and light houses mark the shores upon the waters of the earth.

With this in mind let me describe the educational program of the Chrysler Corporation telling why we have it and whether it pays the corporation to continue it. Young men, remember this. No industry ever does anything that goes into the "red" but once. The second time, it goes to the scrap heap. That is the right place for it.

We have in the Chysler Corporation what is known as the Chrysler Institute of Engineering. It is incorporated under the laws of the State of Michigan to issue diplomas and grant degrees from a high school diploma to a doctor of engineering. It is made up of three schools—graduate, undergraduate, and trade. The two latter schools, I will describe briefly and then return and point to the graduate school as the interneship in engineering as the medical profession would point to theirs.

The undergraduate school, is for Chrysler employees only. No tuition is charged and books are sold at cost. Our last registration found in excess of 1400 enrolled in the various courses. The average age of the 1400 students is about 32 years. This school is made up of a high school course, college preparatory course, a full course in mechanical engineering, a commerce and finance course, an automobile body design course, and a course in foreign trade. Besides these accredited courses, we have many special ones. These are: stenography, typewriting, and office practice for young men and women who wish to acquire or who wish to become more efficient in them; and mechanical drafting for our tool makers, die makers, mechanics, electricians, and foremen. About 200, I would say, subscribe to this class. For men from our Export Division who are not already enrolled in our foreign trade course, we have special classes in foreign languages, better business correspondence, and public speaking. In fact, we are willing to institute classes for any special needs, provided enough of our employees subscribe to warrant it.

The trade school is for the sons of Chrysler employees. They are young men of high school age who are not desirous of attending college but are desirous of acquiring a craft or trade. Now, let us return to the graduate school.

The graduate school, like the interneship in the hospital, is where twice a year we bring in recent outstanding graduate engineers. These chaps are picked from the various colleges of engineering throughout this country, Canada, and Europe. The selections are made by our Educational Board, which Board is made up of seven of our executive engineers, with Mr. Chrysler as the chairman. It is the duty of this Board in the selection of candidates for this interneship to pick the goats from the sheep and the wheat from the chaff and to be reasonably sure that the men selected are by nature endowed to be engineers, and that, perhaps, they would not have made better lawyers, doctors, bankers, preachers, or other types of professional men. The reason industry must do this is that it finds a great distinction between "an engineer" and "a man with an engineering education." They are not even the opposite ends of the same stick. I do not know of a profession that has more misfits than the engineering profession, and I am ashamed to confess that many of us engineers cannot write a business letter which is grammatically correct. Perhaps, the lack of contact with the liberal arts may be the answer to this condition. Now, the doctors, lawyers, bankers, and preachers all say to us, "If you wish to enter our profession, secure first your liberal arts education." You can call it pre-medic, pre-legal, or what you will; but it is just that, a glorified cultural education. These professions tell us that we need two educations—one to teach us how to live and the other how to earn a living. The lack of this education is so conspicuous by its absence

(Continued on page 20)

Planning and the Professional Engineer

By Roswell Canfield

Past President of the Pittsburgh Chapter, Penna. Society of Professional Engineers

On July 1, 1937, the California State Board of Registration for Civil Engineers incorporated in their "Rules and Regulations", a rule that city and regional planning is professional engineering.

The AMERICAN ENGINEER of January, 1939, quotes from Rule V, Civil Engineering, of these Rules and Regulations as follows:

"The term 'civil engineering' shall mean that branch of professional engineering which deals with any or all of the following studies and/or activities—

The economics of, the use and design of, materials of construction and the determination of their physical qualities;

The supervision of the construction of engineering structures;

The investigation of the laws, phenomena and forces of nature; appraisals or valuations.

in connection with fixed works for

Irrigation, drainage, water power, water supply, flood control, inland waterways, harbors, municipal improvements, railroads, highways, tunnels, airports and airways, purification of water, sewerage, refuse disposal, foundations, frames and homogeneous structures, buildings or bridges.

"Said term shall include city and regional planning insofar as any of the above features are concerned therein, and geodetic, cadastral, municipal and topographic surveying, but nothing in this Act contained shall be construed to repeal, alter or modify that certain Act entitled "An Act* to define the duties of and to license land surveyors, and to repeal an Act entitled 'An Act to define the duties of and to license land surveyors,' approved March 31, 1891," approved March 16, 1907." *Now superseded by "An Act to Regulate Land Surveying . . . ."

It is pertinent at this point to remark that the basis at law for the operation of the various City and Regional Planning Commissions in Pennsylvania is in the Police Power of the State.

Judge Kephart in the Supreme Court of Pennsylvania, Western District No. 7, March term, 1926, In Re: Appeal of E. J. White and Alice R. White, his wife, from the Decision of the Board of Appeals under the Zoning Ordinance of the City of Pittsburgh, (White's Appeal, 287 Pa. 259, 266; 134 A409) states:

a. "The police power is a function of government to be exercised in varying degrees in certain spheres of action. It is the chief attribute of a sovereign power, for if in its exercise there is conflict with parts of the constitution, the police power exercised to promote its major objects will prevail."

b. "Police power should not be confused with that of *eminent domain.* Police power controls the use of property by the owner, for the public good, its use otherwise being harmful, while *eminent domain* and taxation take property for public use. Under *eminent domain* compensation is given for property taken, injured or destroyed, while under the police power no payment is made for a diminution in use, even though it amounts to an actual taking or destruction of property. Under the Fourteenth Amendment property cannot be taken except by due process of law. *Regulation under a proper exercise of the police power is due process even though a property in whole or in part is taken or destroyed. The conditions on which its legitimate exercise is predicated should actually exist or their happening so likely that restrait is necessary, similar to a court issuing a restraining order for injuries done or threatened to persons or property."*

c. "Where a statute or ordinance interferes with the use and control of property without rational relations to public safety, health, morals, or general welfare, or is a palpable invasion of rights secured by the fundamental law, the enactment cannot be sustained as a legitimate exercise of police power."

Elsewhere in this decision, the following is quoted: "But while the ordinance as to its general structure may be valid, it must, in specific application to any of its various phases, be tested by the principles discussed." This sentence was concerned particularly with the Zoning Ordinance of the City of Pittsburgh.

The "principles discussed" referred to above have to do with whether the particular ruling made by the Zoning Ordinance could be construed as fulfilling the criteria necessary to conform with the police power of the State. The thought expressed here as throughout the decision, and so completely summed up in the above quoted paragraph, "c" is, that the measure of validity of the Zoning Ordinance or any of its parts is whether in its particular application it conforms to the criteria determining the police power of the State. The decision in another place, stated, "Each case must of course be decided on its own facts. Therefore, we leave other applications open for relief."

It is rather generally conceded that the City and Regional Planning Procedures have authority in law only on the basis as thus far discussed. City and Regional Planning procedures have, however, a further authority based on the voluntary acceptance by the public of its procedures and recommendations. When we consider these particular procedures and recommendations, those which are accepted by common consent, we find most all do have fundamental basis in the police power of the State as practiced by other peoples, both ancient and modern, when the denseness of their populations or the impingement of personal interests made necessary such regulations among them. It is therefore probably true that if issue were taken with the planning bodies in these cases our courts would support the regulations and procedures made or taken. Particularly is this true where properly trained staffs are employed by the planning body.

It is impossible even in a most casual manner to view the workings and material dealt with by planning bodies, to say nothing of the recommendations issued by such bodies, and divorce from their regulations and procedures "the control of the forces of, and the utilization of the materials of nature, and of human activities in connection therewith for the benefit of man." When we consider the above quotation and the definition of the term, "Professional

(Continued on page 22)

The Professional Engineers' Answer to Unionization

Presented at the Conference of Metropolitan Student Chapters, American Society of Civil Engineers, New York, April 22, 1939 *by* D. B. Steinman

PREMISES:

1. *Engineering is a profession,* and not a trade.
2. Membership in a profession involves an obligation—to the public, and to the profession.
3. That which destroys the solidarity of a profession injures the profession.
4. That which blunts the ethics and lowers the ideals of a profession injures the profession.
5. That which lowers the appreciation and respect of the general public for Engineering as a profession injures the profession.
6. The most far-reaching benefit to our profession and *the most effective and enduring contribution to individual welfare* are to be attained through *cooperative effort for the advancement of the profession as a whole in public recognition and esteem.*

UNIONIZATION:

1. Unionization destroys the solidarity of the profession. It disrupts. It divides. It sets class against class, employee against employer, union-member against non-member—instead of all pulling together as fellow-members of one profession.

2. The usual methods of unions (coercion, strikes, picketing, closed shop, *etc.*) should be unthinkable in a profession. Such methods are inconsistent with all of the ethical ideals of the profession.

3. A union seeks selfish immediate advantages for its members even though the public suffers thereby or the long-range interests of the profession are sacrificed.

4. A profession occupies a position of public trust. It violates that trust if it unionizes to threaten or coerce the public.

5. Engineers, in particular, occupy a position of confidence and trust between capital and labor, and between employers and employees. Unionzation is inconsistent with the highest discharge of that trust.

6. Transportation facilities, water supply systems, and light and power services are dependent upon professional engineers for their uninterrupted maintenance and operation. Participation in, or passive support of, a strike which would interrupt or endanger the food, water, power, or light supply, or the transportation services, to the population of a community would be a violation of the public trust "to safeguard life, health and property."

7. Unionization places the sole emphasis on wages and hours, and on union membership, instead of emphasizing qualifications and quality of service.

8. Unionization tends to pull all members of a profession down to the same level, discouraging individual effort, loyalty, and ambition.

9. Unionization blinds its disciples to the common decencies of fair play, mutual consideration, and loyalty, and substitutes selfishness, vindictiveness, and prejudice. Under the strong feelings of unionized warfare, its disciples forget that it is a violation of professional ethics and honor "to attempt to injure the professional reputation, prospects, or business of another Engineer."

10. Unionization is identified with the trades. *Unionization of Engineers undos the work of years in winning public recognition of Engineering as a profession.*

11. *Unionization is inconsistent with the professional spirit and attitude, which places service before profit, the honor and standing of the profession before personal advantage, and the public welfare above all other considerations.*

The Engineers' Vow of Service

We dedicate ourselves to the service of mankind as members of the Engineering Profession.

We consecrate our professional knowledge and skill to the advancement of human welfare, safety and progress.

As we benefit by the technical knowledge and public esteem won for the Profession by the Engineers who labored in the past, we shall ever strive to augment that heritage before passing it on to the Engineers who are to follow.

We therefore affirm our guiding purpose:

So to live and work as to justify the trust and confidence reposed in the Engineering Profession.

To carry out professional engagements with generous measure of performance, and with fidelity towards those whom we undertake to serve.

To foster a spirit of courteous consideration and fraternal cooperation within the Profession.

To extend encouragement and a helping hand to younger Engineers and to those in need.

To place Service before profit, the honor and standing of the Profession before personal advantage and the Public Welfare above all other considerations.

CONCLUSION:

For professional men, unionization is *not* the answer. *Unionization has its place but that place is not in the professions.*

PROBLEM:

How to improve the economic status of the engineering profession?

THE PROFESSIONAL ENGINEERS' ANSWER:

1. Increase public appreciation of the high value of the service of Engineers.

2. Increase public recognition of the high qualifications and standards of the Engineering Profession.

3. Increase the demand for engineering services by stimulating the initiation of worthy public and private works, and by developing additional fields of engineering employment.

4. Reduce the oversupply of engineers by discouraging the competitive drive of engineering schools for student enrollment, and by raising the standards of admission and qualification.

5. Eliminate the competition of the unqualified, the incompetent, and the unethical, through registration and enforcement.

6. Eliminate the misuse and the misappropriation of the designation Engineer, so as to increase public recognition and respect for those bearing this designation.

7. Develop, *through professional organizations in which employers and employees work together,* codes of recommended salaries and fees for Engineers, and promulgate such codes as established *by the profession* (not by a union).

8. Through education and persuasion, *in the name of the profession,* induce employers and officials to respect the codes of recommended salaries and fees and to raise any lower levels of compensation to the standards recommended.

9. *Through professional societies,* be prepared to charge a member with unethical conduct who pays less than the rates prescribed for his region.

10. Establish and develop employment and placement bureaus to help Engineers who are unemployed, and to help employers who are seeking qualified men.

11. Establish loan funds to help Engineers in need.

12. Promote cooperation, understanding, and mutual consideration between employers and employees as Fellow-Engineers.

THE YOUNG GRADUATE:

1. Has to decide for himself whether he is entering a trade or a profession.

2. Has to decide for himself whether he shall join a trade union or a professional society.

3. Has to decide for himself whether, for possible immediate material advantages, he is willing to sacrifice long-range values to himself and to his profession.

4. Has to decide for himself whether he wants to align himself *against* his employers, or to work *with* his employers and other Engineers for the advancement of the profession in public service and public esteem.

5. Has to decide for himself whether he shall join a professional society to which he will be proud to belong, or affiliate with a trade union which he may be ashamed to own.

6. Has to decide for himself whether he wants to align himself with radicals and demagogues, or with the saner and more far-seeing members of his profession.

7. Has to decide for himself whether he wants to be a follower of paid union organizers, or a co-worker of those who really love their profession.

If a young engineer came to me for employment and told me that he had joined a union, I would think twice before engaging him. I would think less of him—

1. Because he has injured the profession.

2. Because he has shown lack of clear thinking and vision.

3. Because he regards engineering as a trade.

4. Because he places wages and hours before service and usefulness.

5. Because he lacks a sense of obligation and loyalty.

6. Because he has declared war against his employers.

7. Because he places his own immediate material interests above the interests of his employer, his profession, and the public.

8. Because he has disqualified himself for impartial handling of questions involving labor.

9. Because he cannot be depended upon in times of stress or emergency.

10. Because, for immediate selfish benefits, he has been willing to injure his own future and the standing of the profession in which he expects to work.

THE EMPLOYER'S VIEWPOINT

The Employer (before unionization):

1. Feels a professional bond with his employees as fellow engineers—a sense of mutual obligation, teamwork, partnership.

2. Gives his employees training, encouragement, consideration, counsel, assistance, inspiration.

3. Expends his strength and resources to find work to keep his organization together.

4. Keeps his men through idle periods and hard times—through a sense of professional obligation to his employees as fellow engineers.

5. Gives his employees raises and profit-sharing bonuses in prosperous times.

6. Contributes to unemployment relief funds and activities to help his fellow engineers in distress.

The Employer (after unionization):

1. Feels that war has been declared against him and that his employees have united to fight him.

2. Feels that his employees have united to demand more from him and to give as little as possible in return.

3. Feels that the sense of partnership and mutual obligation is destroyed.

4. Will not kill himself to find work and to take it at a loss just to keep his men employed.

5. Will drop his men as soon as a job is completed, instead of carrying them at a loss.

6. Will give only the minimum pay required by the union and will not give voluntary increases and bonuses.

7. Will not hire men whose services are worth less than the minimum pay, and will not go out of his way to help beginners get a start.

8. Will promptly drop any man whose services are worth less than the pay prescribed by the union.

9. Will lose his confidence and trust in his employees.

10. Will lose interest in all organizational activities to help young engineers and to improve their economic status.

TO THE YOUNG ENGINEER:

You have consecrated yourself to the Engineering Profession.

Which picture of the profession will you choose?

Cooperation, teamwork, mutual confidence, consideration, loyalty, and ideals of service—

Or—Suspicion, antagonism, distrust, coercion, threats, mud-slinging, and economic warfare?

You have to make the decision.

THE PROFESSIONAL ENGINEERS' POSITION.

The New York State Society of Professional Engineers recently issued the following statement which has received widespread endorsement:

> "Engineers and other professional men do not belong in labor unions and should not be solicited nor encouraged to join. Unionization is inconsistent with the professional spirit and attitude, which places the highest service to the public above personal gain. The State Societies of Professional Engineers and their National Society are interested in improving the economic and professional status of engineers, but believe this should be accomplished through education and public appreciation—not through methods of unionization. We recognize that unionization has its place, but that place is not in the learned professions. Professional men occupy a position of public trust, between capital and labor, and unionization is inconsistent with the highest discharge of that trust."

That is the Professional Engineers' answer to unionization.

EDITORIAL COMMENT

SIMILAR PROBLEMS

TO THE ARCHITECTS OF PENNSYLVANIA

DO YOU KNOW?

First—*That for the time being our State Board of Examiners cannot function?* By Executive order meetings of *all Examining Boards* throughout the State have been halted until after June 1st. This order inflicts a hardship not only upon all applicants for license to practice who took the recent examinations and whose applications for license are now pending, but also a hardship upon all registered architects in the State who have or are applying at this time for senior examination. It also unfairly prevents any out-or-State architect properly qualified to practice architecture in his own State from securing a license to practice in Pennsylvania.

Second—That the fees paid to the Commonwealth by architects submitting applications for licenses and for renewals are sufficiently in excess of the amount granted to the State Board of Examiners of Architects for their own use to enable the State to defray the expenses of examiners for other professions and trades. Such excess funds, if they could be utilized for the necessary investigation and prosecution of illegal practice in the profession in Pennsylvania, could be thoroughly justified. As it is, the architects of Pennsylvania from their meagre resources support the examining boards of other professions and trades, which practice causes the architects unfairly to assume the burden of others.

Third—That the Administrative Code of April 9, 1929, regulating the conduct and status of the Board of Examiners, contains the following paragraph:—

"Whenever under any act of Assembly, enacted at the session of the General Assembly at which this Act was passed, or at any subsequent session of the General Assembly, the right to practice any profession, or work at any trade or occupation, shall be conditioned upon examination licensure, or registration, to hold such examinations, make such investigations, require such information, and do and perform all other acts which may be necessary to determine whether applicants for licensure for registration are qualified to practice the profession or work at the trade or occupation within this Commonwealth, and, in proper cases, to issue licenses and certificates of registration.

"In the performance of its duties under this clause, to hold such examinations, make such investigations, require such information, and do and perform all other acts which may be necessary to determine whether applicants for licensure or registration are qualified, the department shall appoint an advisory committee of not more than five members, of each profession, trade or occupation, applicants to practice or work at which are examined and licensed hereunder. Each such committee shall assist the department in holding examinations and passing upon information submitted. In cases in which there is a State Association of the profession, trade or occupation for which an advisory committee is to be selected hereunder, such State Association may submit to the department, from time to time, a list of ten names of persons qualified for appointment on such committee, and the department's selection of a committee or of persons to fill vacancies thereon shall be made from the names submitted. Members of every advisory committee appointed by the department under the authority hereby conferred, shall serve at the pleasure of the department, and shall be compensated at the rate of fifteen dollars per diem for each day of service rendered to the department, and shall receive the expenses actually incurred by them while engaged in assisting the department, as herein provided, the payment of such expenses, however, to be subject to the rules and regulations of the Executive Board. (Amended June 1, 1931, P. L. 350.)"

In the opinion of our Attorney the profession is entitled, through its State Association, to obtain an Advisory Committee for its Examining Board. Why has such a committee never been recommended for appointment?

These are only three of the many questions which vitally concern the profession. It is not worth your while to be present when they are discussed at the coming Convention? A suitable policy for the guidance of the Officers of the Association, you can personally assist in establishing.

(Reprint from The Pennsylvania Architect)

PERSONAL INSPECTION

When Price Waterhouse & Co., accountants, checked McKesson & Robbins drug and liquor stocks last year, they failed to note that $18,000,000 worth of "inventories" did not exist. When Schenley Distillers Corp. directors got around to making their annual report for 1938, they decided no accountants could be expected to know much about whiskey. So they hired Coverdale & Colpitts, consulting engineers, to prove conclusively that Schenley's $44,000,000 inventories really existed.

Last week the annual report, showing 1938 earnings of $4,050,173, contained Coverdale & Colpitts' solemn assurance: "We have satisfied ourselves by personal inspection that the properties described on these records are in use or available for use . . ." First time any company had ever thus checked its inventories, Schenley's actios was hailed as public-relations stunt-of-the-week. — *Time 3-20-39.*

ENGINEERING THE THING

SCHENECTADY, N. Y. (UP).—The American engineer has assumed permanent control of his works and the nation's production system, according to Professor Russell A. Hall of Union College.

Engineers are gradually dropping their "ghost" roles to take more conspicuous parts as executives, Hall believes.

"In the past the engineer has confined his work principally to construction and industrial production," he said. "He was the taciturn, independent man who surveyed, planned and built, and then went his way leaving the stage to the lawyer, the business man and the banker.

"The present tendency is for the engineer to assume an ever increasing role as an executive controlling the whole scheme of production rather than merely acting in his backstage role of property man."

(Reprint from The New York Post)

THE PARADOX OF SOCIAL PROGRESS

President Doherty of the Carnegie Institute of Technology has recently presented a thought-challenging estimate of current trends in our social, economic and industrial life. We are faced, he tells us, by the paradox that the increase in the efficiency of industrial production necessary to maintain prosperity and social progress within the profit system, of necessity increases rapidly the complexity of our social organization, a complexity which even now is growing faster than our social understanding. "The very improvement of production which would save us from economic and social collapse would apparently also impel us ultimately to the same tragic fate. The remedy and the ill seem equally fatal." The answer to the dilemma which he presents is planned education designed to give us not only a trained leadership but also a great body of citizens who understand so well the social and human issues in a democracy that they will be competent as well as eager to "give critical thought and support to measures initiated for the public good." Our salvation rests upon our ability to think in terms of the common good rather than special interest.

For the engineering schools President Doherty proposes that one-fourth of the student's time and energy be given to a program designed to lead to "a clear historical understanding of the parallel growths of science and engineering on the one hand, and social customs, relations and institutions on the other,—the ability to read purposefully in order to make a critical analysis of a problem involving social and economic elements and to arrive at an intelligent opinion about it, the ability to organize thoughts logically and with purpose, the ability to use the English language and thus express these thoughts effectively, and a continuing interest in these matters—in other words, the desire to become educated."

It is cheering to find a great educational leader and engineer voicing so clearly and effectively the ideal which our Society has already advanced and to whose support we stand committed. The days of narrow technical specialization in our schools are well nigh at an end and our engineering graduates increasingly should be found competent as citizens.

HALE SUTHERLAND
Editor of the Lehigh Valley Engineer

New York State Society Has Annual Spring Meeting

The Spring Meeting of the New York State Society of Professional Engineers, Inc., was held in Albany, the Capitol of the State, on March tenth and eleventh.

It was the occasion for an intensive business session of the Executive Board, the various committees, and a large membership from the Capitol District of the State.

All the Past-Presidents of the Society and 32 Directors attended the Executive Meeting.

Reports were presented by Engineer Post of the publicity Committee, Engineer Davidson of the patent committee, Engineer McDonald of the practice violations committee, Engineer Lame of the legislative committee. The reports of the treasurer and financial secretary were also presented.

Engineer Lame presented a measure affecting the profession as follows:

AN ACT
TO AMEND THE EDUCATION LAW IN RELATION TO LICENSED PROFESSIONAL ENGINEERS

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section 1450 of chapter 21 of the laws of 1909 entitled "An act relating to education, constituting chapter sixteen of the consolidated laws," as amended by chapter 140 of the laws of 1910, as such section was added by chapter 85 of the laws of 1927 and last amended by chapters 331 and 332 of the laws of 1933, is hereby amended to read as follows:

Sec. 1450. Licensed professional engineers and land surveyors. In order to safeguard life, health, property *and the public welfare,* any person practicing or offering to practice professional engineering or land surveying in this state, *whether in a public or private capacity,* shall [hereafter] *except as otherwise specifically provided for in this act,* be required to submit evidence that he or she is qualified so to practice and [shall be] *has been duly* licensed [as hereinafter provided] *in accordance with the provisions of this act.* It shall be unlawful for any person to practice or to offer to practice professional engineering or land surveying in this state or to use the title engineer or surveyor or any other title, sign, card or device in * * * * * * it in a conspicuous place in his principal office, place of business or employment. Every licensed professional engineer or land surveyor may have a seal, approved by the board, * * * * as the board may deem necessary. All plans, specifications, plats and reports prepared by or under the * * * shall be stamped with said seal when filed with public officials. No official * * * * * the seal of a licensed architect of licensed professional engineer. A license as professional engineer or land surveyor, * * * by this article. This article shall not be construed to affect or prevent the practice of architecture by an architect duly licensed under the laws of this state, nor to apply to any building or structure costing ten thousand dollars or less and not exceeding thirty thousand cubic feet, nor to alterations to any building or structure costing ten thousand dollars or less which do not involve changes affecting the structural safety hereof.

Section 2. This act shall take effect immediately.

Explanation—Italic matter is new; matter in brackets is existing law to be removed.

Engineer Lame commented:

"The purpose of the addition of the words 'and the Public Welfare' is to clarify by direct statement the general import and intent of Article 55 of the Education Law relating to the practice of engineering.

"It will greatly reduce the inhibitions of certain groups of licensees within the profession, and therefore will result in a more completely integrated unit in support of this law.

"The addition of 'Whether in a public or private capacity except as otherwise specifically provided for in this act' as indicated in the bill is set up for the purpose of providing a guide for the various state departments, including the Public Service Commission, the Department of Health, and the Civil Service Commission in developing their specifications for general engineering personnel.

"It will enable them to define the requirements in such a manner that the licensees of professional engineering will be recognized as such and their examinations appropriately developed and will also permit a differentiation as specifically stated in the law to provide for engineering assistance of a sub-professional character.

"The basis for this amendment lies in the fact that the licensing of the practice of professional engineering, involving the safeguarding of life, health, property, and the public welfare, is strictly a state governmental requirement and since many of the state departments are involved in one or more of these functions, it is eminently unfair to the existing licensees who are fully supporting this law and subscribe whole-heartedly to its objectives, to find that the great State of New York in the administration of some of its departments is constrained to either totally disregard the context and spirit of the law or treat it in such a manner that it becomes largely impotent."

The interest of the Society was primarily expressed in the measure introduced by Senator Desmond, titled:

"To Amend the Education Law, in relation to qualifications for Licensing Professional Engineers."

The Executive Board approved the measure and recommended the support of the Society in the legislature.

Subsequent to this action, the Society instructed the legislative committee to hold the matter in abeyance until further study could be made.

This resolution was presented and adopted:

> RESOLVED: That the Associate Commissioner for Higher Education be requested to appoint a committee to be composed of an equal number of educators and practitioners in the profession to study the recently proposed Desmond Bill, Senate Introductory No. 1073, and to formulate recommendations for future legislation in respect to education preparation and credits for engineers' registration.

The Assistant Commissioner for Higher Education has been petitioned to appoint such a committee.

The meeting was attended by Deans, from the various engineering schools accredited by the State, who expressed themselves in opposition to the requirements outlined in the Desmond measure.

Dr. D. B. Steinman capably and energetically explained the proposed measure, which is not mandatory in character but which, in general, clarifies the ambiguity in the law, and would permit the Board to test men's ability and training and capacity in a superior manner, and to discourage those who are not well grounded and who did not have a genuine vocational calling for the practice of engineering. He advised that such persons devote their time, money, and energy in another direction.

A nominating committee was elected, consisting of Engineers Scanlon of Buffalo, Avery of Westchester, Dollard of Onondage, Smyth of Bronx, and Burke of Brooklyn.

The luncheon meeting was addressed by Milton E.

(Continued on page 22)

NEW YORK STATE SOCIETY
OF
PROFESSIONAL ENGINEERS
INC.

ANNUAL
CONVENTION

FRIDAY & SATURDAY
MAY 26 & 27, 1939

NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS
FOUNDED 1934

HOTEL COMMODORE

42nd ST. & LEXINGTON AVE.
NEW YORK CITY

ANNUAL MEETING - 10:00 A.M. SATURDAY
LUNCHEON - 12:30 P. M. SATURDAY

NEWS OF STATE SOCIETIES

Editor's Note: THE AMERICAN ENGINEER will carry reports of State and Chapter meetings in the issue succeeding their receipt. We must have copy by the 20th of the month preceding the month of issue. Copy received after that date runs the risk of not being on time.

CALIFORNIA

ENGINEERS' ACT REVISED

The Civil Engineers' Registration Act and the Licensed Land Surveyors' Law have, together with a number of other similar regulatory laws been removed from the general statutes and placed in the Business and Professions Code, which was created by Legislature in 1937. Before incorporating these laws into the new code the California Code Commission, which was created by the Legislature for the purpose of codification of all statutory laws, made a very thorough study of the engineers and surveyors laws, and as a result many revisions were made; however, without change in legal effect. In the codification of these laws the commission has merely restated the existing laws clearly and concisely, eliminating sections that were inoperative and rearranging the text with new section numbers.

The Engineers' and Surveyors' Codified Acts were introduced in the Senate on January 12, 1939, by Senator Phillips of Riverside County; they were passed by both houses of the Legislature on January 25, and have been signed by the Governor, and will become effective 90 days after the adjournment of the fifty-third session of the Legislature.

Although the Code Commission, through its able representative, Arthur McHenry, assistant secretary, prepared the draft of the new text, it was not submitted to the Legislature until it had received the approval of the State Board of Registration of Civil Engineers. During the course of codification the board was furnished preliminary drafts of the code and requested to make recommendations or suggestions. The board and its representatives held numerous conferences with Mr. McHenry before the final draft was approved. The commission is to be commended for its splendid work and its desire to cooperate to the fullest extent with those interested.

There has been a number of bills introduced in the present Legislature that propose to amend both the engineers' and land surveyors' laws. These will be found elsewhere in this issue.

INDIANA

I. S.P. E. NEWS LETTER

Issued by the Indiana Society of Professional Engineers Incorporated

ENFORCEMENT COMMITTEE

Activities of this committee involve complaints regarding practice of engineering by non-registered individuals and misuse of the term "engineer" in advertising, news items, city and telephone directories, etc. Efforts of the committee to date have been along lines of education and information seeking cooperation of reported offenders who are often not aware of their own violation of the Registration Act. Satisfactory results have been obtained in almost all cases by these methods, but the possibility remains that any stubborn offenders can be reported to the State Board of Registration for proper action by the Attorney-General.

Many new applications for engineering registration and also for reinstatement of lapsed registrations have been secured by this committee. Cooperation has been obtained from several firms and individuals advertising free engineering services, bringing an end to such advertising in those cases. By working with the publishers of directories the incorrect listings in classified sections have been reduced or eliminated in some instances. Much work remains to be done along these lines before the present violations are cleared up, and after that a constant vigilance will be necessary.

Whenever the public welfare, or the safeguarding of life, health or property is involved in any engineering operations then all design, supervision and construction must be supervised by a Registered Professional Engineer.

It behooves every engineer to familiarize himself with the Registration Law if the profession is to keep its own ranks clear of malpractice and fulfill its own duty to protect the public interests.

This committee welcomes any reports of violation, backed by actual facts, and will follow up such cases until compliance is secured or other means of handling are necessary.

HISTORY OF THE INDIANA SOCIETY OF PROFESSIONAL ENGINEERS REVIEWED

After the executive committee of the Indiana Engineering Society had been seeking ways and means to arouse more interest in organization in engineering, a group of engineers were invited to meet on the night of January 8, 1937, at the Lincoln Hotel in Indianapolis with Engineer Willard Conlon, Secretary of National Society of Professional Engineers. Engineer Conlon explained the aims and purposes of the National Society and requested that an Indiana Chapter of the National Society be formed.

After much discussion a temporary organization was founded with a membership of 13 engineers and the following temporary officers were selected: Sultan G. Cohen, President; J. V. Smythe, Vice-President; and H. O. Garman, Secretary-Treasurer. Committee assignments were appointed and the work of the Indiana Society was under way.

These temporary committees worked with enthusiastic fervor. Secretary Smythe headed a membership drive and drew on the entire membership for help. Engineers Hallett, Kellam and Brossman produced a Constitution that was promptly adopted by the organization and later accepted by our National Society. Engineer Frank Hardy and his committee watched during the legislative session, which was in progress at that time, to gather material and ideas for future sessions of the General Assembly. Engineer Brunsma headed a chapter activities group that brought the first local chapters—the Calumet Chapter, the St. Joe Valley and Anthony Wayne Chapters. All other committees worked hard and bore fruit.

To continue the work of the organization, all standing committees were appointed at a later meeting. Several special committees were appointed as occasions arose.

Early in the year of 1937, affiliation with the Indiana Engineering Council was accomplished. By this affiliation, a position was established to coordinate the Society's efforts with other engineer organizations and avoid the pitfalls of petty differences within the profession. This united front acquired sufficient respect from the state administration to obtain an appointment to the Registration Board in accordance with the joint recommendations. To date the Council has seen fit to support every position taken by the Society and in turn the Society has added its strength to that of the Council.

The monthly meetings have been a series of packed halls. Even during the summer months, when interest in organizations seems to wane, the meetings have been well attended. Only enthusiastic interest has made this possible.

During the short two years the Society has been in existence the work of the Society has barely begun. One of the biggest fields of activity is in enforcement. The registration law is a strong one but the lethargy of the past is difficult to overcome in a short time. A continuous, vigorous, enforcement program will do much to clarify the professional status of the engineer and earn the profession the public respect it deserves.

An educational program has been launched to acquaint engineers of the state with our registration law and the obligation of engineers in industrial employ to register. There is still a majority who are convinced that the law only applies to engineers in public employ. Those men need education rather than punishment, and it is the aim of the Society to furnish that education.

A committee on ethics and practices headed by Engineers J. T. Hallett worked hard and diligently to compose a code for all engineers in the state to follow. After several months of study of codes established in other states a composite code was drafted and on November 18, 1937, was submitted to the Society and was adopted.

The two annual conventions in Indianapolis—the first held December 10, 1937, at the Claypool Hotel and the second session on December 16, 1938, at the Lincoln Hotel—were both very gratifying successes under the capable guidance of Engineer "Ole" Johnson. Both conventions were attended by some 325 engineers. The morning sessions were devoted to business of the Society;

the afternoon session devoted to problems confronting the profession which were presented by invited speakers and then in the evening the conventions were terminated with a banquet. At the banquet of the first convention Engineer Perry T. Ford, President National Society of Professional Engineers, and Mr. Charles W. Chase, President Indianapolis Railways, were the speakers. The second convention was honored by having Engineer John W. Wheeler, Assistant Chief Engineer, Chicago, Burlington & Quincy Railroad, as speaker.

At the present time the Society has grown from the original group of 13 engineers to a total of 508 members.

In the course of two years, the Indiana Society of Professional Engineers has come into being and developed into the largest single technical membership and activity in the State of Indiana. This phenomenal growth is not entirely the result of propaganda or promotion, but rather the result of the combination of a vehicle that met a real need of a great profession and the confidence and untiring efforts of a faithful membership. The Society has awakened and aroused a professional consciousness that leads us to a new horizon. The strength of the Society has been barely felt. The continued growth, combined with a continuation of the enthusiasm and interest of the past two years, opens the way to a future of unlimited possibilities. Therein lies the challenge. Are the engineers at large satisfied with the status of the profession?

SPECIAL ISSUE OF THE NEWS LETTER

This issue of the News Letter, that for April, is being put out in the printed form as an experiment. As with other issues, it is being sent to the entire membership. In addition, a copy is being sent to each registered professional engineer working or living in Indiana not now a member of the Society. It is hoped that by this contact, and by the character and viewpoint of several articles in the issue, an interest in society membership will be aroused among the professional group at large. Also it is hoped that engineers in general, both those registered and those who practice engineering and are therefor eligible for registration, will have brought to their attention the necessity for registration in the interest of public welfare and safety and in the interest of professional unity and well being.

THE CALUMET CHAPTER OF THE INDIANA SOCIETY OF PROFESSIONAL ENGINEERS

The men primarily responsible for the organization of the Calumet Chapter are Engineers C. S. Mitchell, R. J. Dick, L. L. Dillingham, of the Indiana State Highway Department, and Engineer Frank Schutt, of Gary, Indiana. To these men should go full credit for the complete organization of the Chapter and the drafting of its constitution.

The Calumet Chapter embraces Lake and Porter Counties and holds its meetings on the first Wednesday of every month in the Lake Superior Court Building in Gary, Indiana. On occasions, dinner meetings have been held so as to promote a friendlier feeling between the members and prospective new members.

THE ANTHONY WAYNE CHAPTER IS ACTIVE

The Anthony Wayne Chapter was organized about one year ago, in fact the State Society granted a chapter in March of 1938. In less than a year we have enrolled as members about 60% of the licensed engineers in the eleven counties covered by the Chapter.

During the late winter and spring of last year most of the activities consisted of establishing and organizing the Chapter. However, when meetings were resumed in the fall, activities were centered around the legislative program. We feel that our representatives have been very active in this phase of the program.

House Bill No. 546 which was before the General Assembly was conceived by the President of the Chapter, Clyde Walb. This was to provide for the payment of licensed county surveyors twice the salary of the county surveyors that are not registered.

ENGINEERS LEAVE STATE HIGHWAY COMMISSION

During the past month Engineers J. T. Hallett, K. B. Wolfskill, B. B. Straight, T. Roesch, C. C. Tabor, V. M. Ralston and J. S. Lambright have left the employment of the State Highway Commission.

Engineer Hallett has accepted a position with the Portland Cement Association as Research Engineer Stationed in Binghamton, New York, and Engineer Wolfskill is now with P. W. A. as Resident Engineer Inspector at New Albany, Ind. Engineer Straight has become affiliated with Joseph H. Wildermuth, Architect, in Gary, Indiana, as Superintendent. Engineer Roesch is now with Montgomery-Ward Company in their Engineering Department as an Architect in Chicago, Ill.

Engineers C. C. Tabor and V. M. Ralston are with W. P. A. forces. The former is in the office at South Bend, Indiana, and the latter is in the office here in Indianapolis.

Engineer J. S. Lambright has transferred to the State Conservation Department.

The I S. P. E. News Letter and their many friends wish them well in their new enterprises.

SAM HADDEN SPEAKS

One of the features of the April meeting of the Society, was a talk by Sam Hadden, Executive Secretary of the Mineral Aggregates Association, on "Engineering Organizations." Mr. Hadden, long active in engineering and professional societies and at one time a national officer in the American Association of Engineers, discussed the development of the professional engineering movement in this country, the need for unity among the various branches and fields of the profession, the pitfalls which are to be avoided by organizations such as our own.

Mr. Hadden, a graduate of the University of Illinois, practiced engineering in the Middle West for some years before going into journalism and publishing in Indianapolis later, he took over his present post with the Aggregate Association.

NOMINATING COMMITTEE REPORTS

One of the features of the March meeting of the Society was the report of the nominating committee for officers for 1939, presented by Chairman W. W. Hadley.

M. G. (Ole) Johnson, City Engineer of Indianapolis and First Vice President of the Society, was nominated for the office of President.

Clyde A. Walb and Frank Schutt were named for the office of First Vice President, and Asher Gray and Clyde Yater will run for Second Vice President.

J. S. Lambright and K. B. Wolfskill were nominated for Secretary, with Carl Vogelesang and James E. Loer as candidate for Treasurer.

D. H. Walker the present National Director was renominated. It was felt that the interests of the Society could best be served by having continuity in his office.

Roy Biberstine and Wilbur Smith were named candidates for one of the State Directorships, and Glenn H. Allen and John Gates for the other.

President Cohen announced at the close of the Committee report, that he had appointed the same committee to handle the election. In addition to Hadley the members are Jos. Wysong, F. A. Henning, Isadore Mazur and Fred Mendenhall.

EMPLOYMENT AID

In the future, more efficient help can be given in employment aid, a function carried on by the Society. At a recent meeting of the Engineering Council, other member organizations of the Council decided to institute a similar service in their own organization and effective contacts established between the organizations. After this plan is completed, it is hoped that unemployed engineers can be readily established in new positions.

NEW YORK

BRONX PROFESSIONAL ENGINEERS ACTIVE IN CIVIC AFFAIRS OF COUNTY

Reports by Committee Chairmen to Engineer William L. A. Arctander, President of the Bronx County Chapter of The New York State Society of Professional Engineers at the monthly meeting at Concourse Plaza Hotel, April 6th, indicated the active interest Professional Engineers are taking in the affairs of Bronx County.

Engineer Joseph B. Diamond, Chairman of the Essay Contest Committee stated that he had received excellent response to, and many favorable comments on the Essay Contest for Bronx High School Students on the subject, "The Role of The Engineer in Public Affairs."

The Essays for the contest which closed May 10th, was to be not more than 1,000 words in length. First, second and third prizes of $25.00, $15.00 and $10.00 respectively, are to be awarded, and a certificate for each of the best 10 essays.

Engineer Raymond J. Van Wagner, Chairman of Public Relations Committee reported active participation with the Allied Civic Association of Eastchester to have a Bronx resident appointed to the Board of Transportation. Engineer Van Wagner is a member of the Scope and Plan Committee of the Civic Association.

Engineers Arctander and Diamond are members of the Committee for the Ball to be given for the Benefit of the Tuberculosis Hospital on April 22nd.

Engineer Joseph L. Brennan is active on the Deegan Highway Memorial Committee.

President Arctander acknowledged receipt of a communication from Borough President James J. Lyons requesting assistance of Professional Engineers in securing proper numbering of properties in the Bronx.

Engineer Rudolph C. Lang, Past President, and member of the New York State Patent Committee said that when an invention is infringed upon, the law is vague as to where the injured party may present a suit. The Committee is working to clarify this situation and is looking at both sides of the patent question to arrive at an equitable decision.

The Chapter, in recognition of the excellent and faithful work of Engineer H. McKean Conner as Secretary under Past President Lang, elected him to the Executive Board for a term to expire March, 1940.

In a gracious speech given in his best manner, Professor Alexander Haring presented to Past President Rudolph C. Lang, on behalf of the Chapter, a beautiful pen and pencil set, as a token of the esteem of the Chapter and for his unselfish devotion and the high qualities of leadership displayed during his administration.

Engineer Lang responded in appreciation and gave sound advice for the future good of the Chapter.

BRONX PROFESSIONAL ENGINEERS MEET

The Regular Monthly Meeting of the Bronx County Chapter, New York State Society of Professional Engineers, was held at Concourse Plaza Hotel, Bronx, New York, Thursday, May 4th, at 8:30 P. M.

DR. ALEXANDER HARING OF THE BRONX APPOINTED SECRETARY TO THE DEPARTMENT OF PUBLIC WORKS

The members of the Bronx County Chapter, The New York State Society of Professional Engineers, congratulate Past President Alexander Haring on his appointment to the responsible position of Secretary to the Department of Public Works of the City of New York.

Dr. Haring is a retired Professor of Bridge and Railroad Engineering of New York University, a Past President of Bronx County Chapter of Professional Engineers, a Past President of the Bronx Rotary Club, and has been for many years prominent in civic affairs of the Bronx.

BRONX ENGINEERS OPPOSE CHANGE IN ADMINISTRATIVE CODE OF THE CITY OF NEW YORK

In the interest of public welfare, the Bronx County Chapter voiced to the Hon. James A. Deering, Chairman of Committee on Buildings, their opposition to the proposed amendment to the Administrative Code of the City of New York which would allow the owner of a building, who has not been required to prove his ability to read plans or understand the engineering or architectural features thereof, to sign affidavits accompanying Certificates of Occupancy, to the possible detriment of public safety.

COUNTY CHAPTER PROTECTS TITLE "ENGINEER"

Fights Local Legislation to License Boiler Operators as "Engineers"

The Nassua County Chapter of the New York State Society of Professional Engineers has been waging a consistent and effective campaign against attempts of engine operators and boiler operators to secure local licensing as "Engineers."

The following news item and copy of a letter sent to all village boards in the county tell the story.

Objection to the alleged misuse of the word "engineer" in municipal licensing ordinances recorded by the Nassau county charter, New York State Society of Professional Engineers, in letters sent to all Nassau county village boards.

The objection was voted by the chapter at its meeting in the Bar Association building in Mineola, after Frederick Malkmus of Lynbrook, president, had addressed the group, warning of the fact that "since it is now difficult by law to use the title of engineer, it now seems more desirable than ever to some individuals and organizations."

Unit of National Society

The organization, which has made demands to all local boards for licensing, is the county unit of the National Association of Power Engineers.

"If these men sincerely wish to be licensed in the best interests of the public," Malkmus said, "and if they are willing to assume the responsibility which licensing entails, then I firmly believe that these men should be licensed.

"If, in addition, they request this license under a title truly descriptive of the work they perform and not as an engineer, no matter how the work engineer may be qualified, then I believe that we should promise them our whole-hearted cooperation.

"If these men are not willing to accept a license under any title other than that of engineer, then obviously it is the title engineer that these men want and not the responsibility of license."

Members of the chapter will indicate in their letter that they would not be opposed to the use of the word "operator" in connection with high pressure boiler-men.

February 10, 1939.

To the Mayor
and
Board of Trustees:
Gentlemen:

The Nassau County Chapter of the New York State Society of Professional Engineers has been informed that you have been petitioned by certain groups to license individuals under titles which include the word "engineer."

As engineers licensed by the State of New York to practice the profession of engineering, we have no objection to the granting of a license to any individual ready to assume the responsibilities such licensing implies.

We are, however, vitally concerned with the granting of any title including the word "engineer," no matter how qualified, believing that it will tend to confuse the professional meaning of the title engineer in the public mind.

We earnestly request that you give consideration only to titles truly descriptive of the work performed by the prospective licensees.

As an instance of this, the City of New York grants a certificate of qualification to persons operating steam boilers under the title "Steam Boiler Operator," similarly, operators of machines and contractors' equipment are usually referred to as "Crane Operator," "Shovel Operator," etc.

Your earnest consideration of the foregoing matter will be appreciated.

Very truly yours,
(Signed) FREDERICK W. MALKMUS
President.

Engineer Arthur W. Brandt, State Superintendent of Public Works, and Engineer Harvey O. Schermerhorn, State Commissioner of Highways, were honor guests recently at a dinner meeting at the Hendrick Hudson Hotel in Troy, N. Y.

All Engineers, whether members of the Society or not, residing in the Capital District, were invited to attend.

Addresses: Alfred E. Roche, President N. Y. State Society of Professional Engineers.

Milton E. Loomis, State Commissioner for Professional Education.

The Board of Examiners for Engineers License, Norman R. Gibson, Erich Hausmann, David B. Steinman, Royal G. Finch, Virgil M. Palmer.

Clarence W. Post, Chief Engineer, N. Y. State Works Progress Administration.

William O. Hotchkiss, President, Rensselaer Polytechnic Institute.

Gardner C. George, President Albany Co. Chapter.
William B. Chadsey, President Schenectady Co. Chapter.
Sylvester J. Sullivan, President Tri-County Chapter.
Arthur W. Spenser, Director, Glens Falls.
Carl W. Robbins, President Rensselaer Co. Chapter.
Elmer C. Lawton, Director, Albany.

The 10th anniversary of the Queens County chapter of the New York State Society of Professional Engineers was celebrated with a dinner-dance on May 5 in the Stewart Manor Country Club.

The state society was founded in 1926, and the Queens chapter was chartered three years later. Of the 12,000 engineers licensed to practice in New York State, 1,200 reside in Queens. While all are not members of the Queens chapter, its membership ranks fifth among the 62 counties of the state.

The chapter boasts the only woman member of any chapter in the state, Engineer Marie Reith of Jamaica. Men who served as president of the chapter include the late Edgar A. McKenna of Queens Village, who was engineer in charge of bridges and structures for the New York Central Railroad; J. Franklin Perrine, chief engineer of the bureau of sewers for Queens Bureau of Highways; George P. Winn, consulting engineer on highway and subsurface structures.

George H. Burns, of Jamaica, the president, is consulting engineer on city-planning and developments.

Invited guests included John C. Reidel of Brooklyn, chief engineer of the Board of Estimate, and vice-president of the national society; Frederick H. Zurmuhlen, engineer-in-charge of U. S. Government interests at the World Fair and president-elect of the state society; Frederick W. Malkmus, president of the Nassau County chapter, and Alfred C. Roche of Albany, past president of the state society.

The committee of engineers in charge was assisted by a women's committee, headed by Mrs. Burns. Assisting her were Mrs. William H. Bertram of Queens Village, Mrs. Edward J. Flanagan of Forest Hills, Mrs. Frank Lilien of Long Island City, Mrs. William H. Walker of Flushing, Mrs. Andrew K. Johnson of St. Albans, Mrs. J. Franklin Perrine of East Elmhurst, Mrs. Charles Clos of Elmhurst, Mrs. Martin Nelson of Long Island City and Mrs. Walter P. Warendorf of Woodside.

On the committee of engineers were Martin Nelson of Long Island City, Edward J. Flanagan of Elmhurst, Andrew J. Cifuni of Corona, I. W. Conway of Long Island City, Edward J. Flanagan of Forest Hills, Walter P. Warendorf of Woodside, William H. Bertram of Queens Village, Justin C. McCarthy of Little Neck and Edgar N. Smith of Bayside.

George H. Burns of Jamaica, president of the Queens County Chapter of the New York State Society of Professional Engineers, announced the personnel of the committees who will serve for 1939.

Violations and Grievances, Harry D. Garretson, chairman; William L. Fredericks, Carol H. Shaw, John J. Beggs and Thomas V. Burke.

Civil Service, John J. Delaney, chairman; James V. McGarry, Oscar Gunther, Robert J. Morton, Karl Vaupel.

Character, J. Franklin Perrine, chairman; Andrey K. Johnson, Michael J. Shugrue, Joseph H. Kline, Oscar Erlandsen.

Chapter Activities, Martin Nelson, chairman; I. W. Conway, Marie Reith, Charles Clos, Joseph J. McGovern.

Membership and Arrears, Joseph H. Kline, chairman; William H. Bertram, Edgar N. Smith, Francis J. McGarry, Thomas D. Eaton.

Retainers and Appointments, Walter P. Warendorff, chairman; William H. Walker, J. Homer Sanford, Charles S. Stratton, Joseph M. Tormey.

Procedure, Frank Lilien, chairman; J. Raymond Pennefather, Hans B. Lippelt, Justin C. McCarthy, William C. Kochendoerffer.

—From the Long Island Daily Press.

LICENSING EXAMINATIONS IN N. Y. STATE

The 192nd meeting of the State Board of Examiners of Professional Engineers was held in New York City on April 11.

The Board considered and approved the ratings of the 243 candidates who took the January 1939 written examinations. Of the 243 candiates, 150 (or 62 percent) passed the examinations and were approved for license; and 93 (or 38 percent) failed or were conditioned, and were held for re-examination.

The annual meeting of the New York State Society of Professional Engineers, Inc., will be held in New York at the Hotel Commodore on May twenty-sixth and twenty-seventh.

The board will convene at 4 p. m. on May twenty-sixth for the purpose of transacting business. The Society membership will convene at 10 a. m. on Saturday, May twenty-seventh.

The board will receive reports of its publicity, membership, legislative, professional practice, auditing, practice violations, and patent committees. The financial reports will also be received.

The order of business of the annual meeting is set forth in our by-laws as follows:

1. Roll Call of Officers.
2. Reading of Minutes.
3. Reading of Communications.
4. Reports of Officers.
5. Reports of Committees.
6. Unfinished Business.
7. Election of Officers.
8. Installation of Officers.
9. New Business.
10. Adjournment.

NEW JERSEY

The Nineteenth Annual Dinner of the Passaic County Engineering Society and the Fourth Annual Northern New Jersey Regional Get-To-Gether of the New Jersey Association of Professional Engineers and Land Surveyors, comprising Union, Essex, Hudson, Bergen, Morris, Sussex, and Passaic County Chapters was held Thursday, April 27, 1939 at 7:00 P. M. at the New Colonial Inn, Singac, N. J. Harold G. Hoffman was guest speaker. Exclusive facilities of the renowned New Colonial Inn, including Mike Brent's Orchestra and famous floor show.

The Dinner Committee chairman was Engineer Russell H. Benjamin, Passaic County Park Commission, Paterson, N. J.

The regular meeting of the Monmouth-Ocean Society of Professional Engineers was held at the Marine Grill, Ocean Ave., Asbury Park, N. J., April 5.

Engineers Lawrence Wagner and Frederick Shinn presented an illustrated talk on the construction of the Mantaloking Bridge.

Reports of all committees was made at this meeting.

NOTICE IMPORTANT

Renew your License immediately, so that your name will appear in this year's Roster. Also—pay your Chapter, State and National dues.

LEO K. MCKEE,
Secretary

ESSEX COUNTY ENGINEERING SOCIETY

Chapter of New Jersey Association of Professional Engineers and Land Surveyors

LADIES' NIGHT THURSDAY, APRIL 13, 1939

PLACE: PALMER HOUSE, East Orange, New Jersey

DINNER: 6:45 P. M.

Reception to President and Mrs. Spencer C. Hamilton, Jr., our guests of honor.

Engineer Hamilton, long an active worker in our Chapter was officially welcomed as Chief Pilot of the State Association.

PROGRAM OF ENTERTAINMENT

HILL BILLIES, BAND and NOVELTIES.

JUVENILE ACROBATIC DANCER. Formerly with Warner Brothers.

Other Attractions; including dancing.

HERMAN B. LEHLBACH
President

HUBERT P. MATTE
Secretary

OHIO

LEGISLATION

All engineers will be interested and pleased to know that House Bill No. 636 TO ENABLE ENGINEERS, RESIDENTS of the STATE OF OHIO SINCE MARCH 26, 1934, to OBTAIN LICENSES WITHOUT EXAMINATIONS, has been withdrawn by the author. The efforts of the engineers and surveyors of all parts of the State through their letters and telegrams, and other effective work were directly responsible for this action.

Re: Senate Bill No. 172 TO AMEND SECTION 1083-12 G. C. ALLOWING ENGINEERS AND SURVEYORS UNTIL JUNE 11, 1940, TO OBTAIN LICENSES WITHOUT EXAMINATIONS, a large delegation of Professional Engineers went to Columbus on March 22, 1939, to attend the hearing on this bill in the Commerce and Labor Committee. We were represented by Engineers W. D. Young, Robert T. Callaghan, Harvey R. Hawgood, and Frank J. Schwemler, each of whom spoke in opposition to the bill. The proponents of the bill were also well organized and were present in large numbers. The Senate Committee deferred action until Mar. 29, 1939.

On Mar. 22, the professional engineers delegation also attended the hearing on Senate Bill No. 1 4 before the Public Works and Buildings Committee. This bill makes it unlawful "for any . . . agent of any political subdivision of the State to accept . . . any plans, etc., for any . . . improvement in the State, unless said plans have been prepared and signed by a person legally qualified to prepare . . . plans, etc., in this State." This bill will tend to stiffen and amplify the Registration Law. There was no opposition to S. B. No. 184 at the Committee hearing.

(From the Cleveland Engineer)

PENNSYLVANIA

"SPARKS"

Harrisburg Chapter Pennsylvania Society of Professional Engineers

April, 1939

H. S. Mattimore, Pres.

Russell S. Conrad,
Society and Editor
of "Sparks"

RESUME—MARCH MEETING

The regular meeting of the Harrisburg Chapter, P. S. P. E., was held at the Central Y. M. C. A. at Front & North Streets on March 20, 1939, following a chicken dinner which, from the favorable comments, was thoroughly enjoyed. The meeting opened at 6:30 P. M. and closed at 8:25 P. M.

There were 45 members and guests present, including the following Engineers, Colonel C. E. Myers, Chairman of the State Registration Board for Professional Licensing; H. R. Moffitt, Asst. Chief Engineer of Maintenance, Penna. Dept. of Highways; P. M. Tebbs, Asst. Chief Engineer of Construction, Penna. Dept. of Highways, and E. J. Kinney, Division Engineer, Penna. Turnpike Commission.

Proposed amendments to the Constitution and By-Laws affecting the admission of members to this Chapter were read and it was resolved to advertise these amendments in the April issue of "SPARKS" and vote on same at the closed meeting in May.

The qualifications of Engineers passed by the Board were discussed, and it appeared the individual Registered Engineers were the real guardians of their Profession.

Past President Geiger announced changes were contemplated in the Architects Act, but the changes would be passed upon by the joint committee of Engineers and Architects before being presented to the Legislature for action.

APRIL MEETING

A regular open meeting was held at the Central Y. M. C. A. at Front and North Streets in Harrisburg April 17th.

Your Program Committee, George Rahn, Chairman, arranged a real treat, John W. Poulter, Research Engineer for the Koehring Company of Milwaukee, Wisconsin, was present with films of scenes and highways in Germany; the Road Show in Munich; trucks and various hauling equipment on the streets and highways; cities, parks, and places of historic interest; highways and traffic around London and scenes of the new highway between Hamilton and Toronto in Ontario.

NEW YORK'S WORLD'S FAIR TOUR

The Engineers Society of Pennsylvania has extended an invitation to this Society to participate in a three-day trip to New York and vicinity on May 19, 20, 21. (Or a one-day trip May 19th only).

May 19th. Leave Harrisburg, P. R .R. at 6:34 A. M., E. S. T. Arrive New York 9:50 A. M. Boat up Hudson River to Fair.

May 20th. Free for individual planning.

May 21st. Free for individual planning.

All-expense cost. (three-day trip) Adults $18.00. Children $14.00.

All-expense cost. (one-day trip) Adults $9.00. Children $5.25.

For details write Engineers Society of Pennsylvania, P. O. Box 1145, Harrisburg, Pa.

SPARKS FROM THE ANVIL

We were happy to see "Tommy" Baker at our last meeting and hope he enjoyed his vacation in Florida.

Did you know that Engineer Moffitt was a Director and Charter Member of the Johnstown Chapter, and Engineer Kinney a director of the Midwestern Pennsylvania Chapter?

The special committee which has been working hard endeavoring to locate a permanent place to hold our dinner meetings, seem to have struck upon the right place in the Central Y. M. C. A. at Front and North Streets; although we did observe that Presiden Mattimore finally had to pay for parking privileges.

The officers wish to thank the members for responding in such a satisfactory manner in paying their dues. It has been suggested that a motion be introduced at the May meeting relieving the members owing dues for 1937 of that obligation. It is not the intention of the Chapter to work a hardship upon any member.

Don't let your Membership Committee do all the work. Help them to get new members.

THE PITTSBURGH ENGINEER

Pittsburgh Chapter Pennsylvania Society of Professional Engineers

Issued Monthly by Publications Committee

Martin C. Knabe, Chairman; Earl Dwight Covell, Vice Chairman

PITTSBURGH CHAPTER MEETING: Fort Pitt Hotel 8:00 p. m., Thursday, April 20, 1939. SPEAKER: A. C. CLARKE, Assistant Chief Engineer, Baltimore & Ohio R. R Company. SUBJECT: "SOME PHASES OF THE CURRENT TRANSPORTATION PROBLEM."

NEW MEMBERS

We are glad to welcome

Engineer EDWARD A. CROAK, City County Bldg., Pittsburgh, Pa.

Engineer GEMMILL C. DAVIS, 67 Bellanca Ave., Pittsburgh. Pa.

Engineer HARRY S. DWYER, P. O. Box 343, Oakmont, Pa.

Engineer F. NIESEMANN, 1639 Beechwood Blvd., Pittsburgh, Pa.

Engineer ALBERT T. RITCHIE, 1 Cedar Blvd., South Hills, Pa.

Engineer RALPH F. WILPS, Herminie, Pennsylvania. as members.

Engineer CLARENCE F. RICE and Engineer GEORGE T. GARDENER were transferred to the JOHNSTOWN CHAPTER.

The Membership now totals 177.

NEWS

The Metropolitan Bill, which was considered at the last meeting of the Chapter was sent to the Board of Direction for study and action; and the board has gone on record as opposing the bill.

Engineer WILLARD H. BUENTE has been appointed Chief Engineer of the City Planning Commission.

The March meeting of the Chapter was well attended. Legislator Dick, the Scheduled speaker, was unable to attend, but Col C. E. Myers, President of the State Registration Board for Professional Engineers was in Pittsburgh at the time and gave an excellent talk on the workings of the board. His audience indicated their interest with numerous questions.

The Chairmen of the various Chapter Committees report the following membership:

AUDIT COMMITTEE

Engr. H. S. AYRES, Chairman, 303 City County Bldg., Pittsburgh. Pa.

Engr. E. H. MOORE 119 Emerson Ave., Aspinwall, Pa.

Engr. G. M. LEVINSON, 1230 Oliver Bldg., Pittsburgh, Pa.

NOMINATIONS COMMITTEE

Engr. G. W. SCHUSLER, 324 Fourth Ave., Pittsburgh, Pa.

Engr. J. M. DUFF, 2227 Jane Street, Pittsburgh, Pa.

Engr. M. C. KNABE, 909 Bessemer Building, Pittsburgh, Pa.

Engr. J. D. STEVENSON, City County Bldg., Pittsburgh, Pa.

Engr. W. J. BRUNER, 3254 Orleans Street, Pittsburgh, Pa.

MEMBERSHIP COMMITTEE

Engr. G. W. SCHUSLER, Chairman, 324 Fourth Ave., Pittsburgh, Pa.

Engr. J. W. CROSSLEY, V. Chairman, 113 Tenth Ave., Aspinwall, Pa.

Engr. RAGNAR BERG, Koppers Bldg., Pittsburgh, Pa.

Engr. P. W. DAVIS, 523 East End. Ave., Pittsburgh, Pa.

Engr. E. A HOLBROOK, University of Pittsburgh, Pittsburgh, Pa.

Engr. SAMUEL ECKELS, 616 Grant Building, Pittsburgh, Pa.

Engr. N. B. JACOBS, 507 Westinghouse Bldg., Pittsburgh, Pa.

Engr. R. N. NAGEL, 1322 Evergreen Avenue, Millvale, Pa.

Engr. A. E. OLSON, 265 Cascade Road, Forest Hills, Pa.

PUBLICATIONS COMMITTEE

Engr. MARTIN C. KNABE, Chairman, 909 Bessemer Bldg., Pittsburgh, Pa.

Engr. EARL D. COVELL, V. Chairman, 733 Talbot Ave., Braddock, Pa.

Engr. ELWOOD S. TOWER, 213 Investment Bldg., Pittsburgh, Pa.

Engr. JOHN J. MURRAY, 805 S. Braddock Ave., Pittsburgh, Pa.

MEETINGS COMMITTEE

Engr. J. J. PAINE, Chairman, 1430 N. Euclid Ave., Pittsburgh, Pa.

Engr. F. HUGHES MOYER, V. Chairman, 4234 Parkman Ave., Pittsburgh, Pa.

Engr. C. F. HOULIHAN, 7043 Kelly Street, Pittsburgh. Pa.

ENTERTAINMENT COMMITTEE

Engr. WM. KREILING, Chairman, 1717 Montpelier Ave., Pittsburgh, Pa.

Engr. C. N. CARTEN, V. Chairman, 400 S. Linden Ave., Pittsburgh, Pa.

Engr. E. L. SCHMIDT, Wabash Bldg., Pittsburgh, Pa.

Engr. R. L. HORNE, 100 Evans Street, Crafton, Pa.

THE LEHIGH VALLEY ENGINEER

Lehigh Valley Chapter Pennsylvania Society of Professional Engineers

ISSUED MONTHLY BY THE

Publication Committee—Engineer Hale Sutherland—Chairman

Address All Communications to Engineer Frank Nagy 841 South Poplar St., Allentown, Pa.

COMMITTEE FOR 1939

Administrative Committee: J. H. Morrow, Chairman; G. E. Pidcock; H. L. Ramage; H. G. Payrow; V. W. Anckaitis.

Legislative Committee: Atty. Jos. B. Walker, Chairman; F. C. Peters; E. W. Meckley; T. H. Moyer.

Membership Committee: F. C. Peters, Chairman; L. A. Villard, H. T. Carter; S. G. Reque; R. E. Kirkhuff.

Auditing Committee: C. T. Shoch, Chairman; Sol. Keck; R. T. Peppell.

Publication Committee: Prof. Hale Sutherland, Chairman; Prof. Lynn Perry; L. M. Fraivillig.

Meetings Committee: H. C. Roeder, Chairman; G. M. Overfield; Frank Miller; E. F. Boyer.

Entertainment Committee: J. B. Gaffney, Chairman; H. H. McHose; W. S. Bell; W. R. Schnabel.

Ethics and Practice Committee: Prof. H. G. Payrow, Chairman; M. E. Boyer; G. E. Pidcock.

Public Relations Committee: H. C. Roeder, Chairman; G. E. Yundt; L. M. Fraivillig; C. A. Reese.

Registration Committee: G. E. Pidcock, Chairman; J. A. Gish, Jr.; L. P. Grossart; Sol. Keck; J. S. Wise, Jr.

New Chapter Committee: H. L. Ramage, Chairman; W. S. Lohr; F. C. Peters; J. A. Gish, Jr.

Roster Committee: L. M. Fraivillig, Chairman; M. E. Boyer; H. F. Bascom; T. N. Haffner; J. A. Gish, Jr.

Editor—Lehigh Valley Engineer: Frank Nagy.

MEETINGS

On the 12th of April, a Chapter gathering was held at the Elks Club, Allentown, Pa.

Starting with a dinner at 6:30 P. M., an unusually interesting program was arranged by the Meetings Committee. Dr. Alexander Haring, Chief Engineer of the Construction Department, New York Worlds Fair of 1939, as our great speaker, gave us a talk on the engineering features of the 1939 World Fair.

Our guest at this meeting, was Engineer Robert Hall Craig, President of the Pennsylvania Society of Professional Engineers. At the noon luncheon on this day at the Lions Club of Allentown, Engineer Craig delivered an address on the subject of "The Professional Engineer."

HIGHLIGHTS OF MARCH CHAPTER MEETING

The March meeting at the Sun Inn, Bethlehem, Pa., was attended by approximately 50 members and guests. Following a short business meeting, Mr. Ario Wear, Commissioner of the Bethlehem Water Department, gave us a descriptive talk on the recently authorized "Wild Creek" water supply system for the City of Bethlehem.

Mr. Wear, an engineer himself, gave credit for the excellent work in connection with the planning of this project, to Engineer Fox, City Engineer, and Engineer Fraivillig, Assistant City Engineer, both members of our Chapter.

NEW MEMBERS

A cordial welcome is extended, on behalf of the Chapter, to the following new members:

ENGINEER THEODORE S. HENDERSON, 1427 Chew St., Allentown, Lehigh County, Pa. He was recommended for membership by Engineers Anckaitis, Morrow, and Roeder.

ENGINEER WILLIAM MARSHALL, 45 South Ninth St., Allentown, Lehigh County, Pa. He was recommended for membership by Engineers Anckaitis, Hutchsteiner, and Bell.

ENGINEER A. C. SNYDER, 518 West Union Blvd., Bethlehem, Pa. He was recommended for membership by Engineers Morrow, Peters, and Anckaitis.

ENGINEER DANIEL J. MILLER, 153 South Main St., Bangor, Pa. He was recommended for membership by Engineers Anackaitis, Moyer, and Peters.

Tentative schedule of chapter meetings for 1939:

May 5—Easton, Pa.
June 2—Palmerton, Pa.
August 0—Stroudsburg, Pa.
October 6—Allentown, Pa.,
November 3—Bethlehem, Pa.
December 1, Allentown, Pa.

PHILADELPHIA CHAPTER LEADS THE WAY

The Philadelphia Chapter recently sponsored a joint meeting with the local Chapter of the American Society of Civil Engineers. This meeting is described in the following letter from Secretary Bamberger to our Secretary, and needs no comment.

"Our joint meeting of these two Philadelphia Chapters on the subject of registration was truly a success, as far as placing the subject before the engineer group, and which of course was our main issue. We made no drive for members at this meeting, but we can not help but feel that it awakened thoughts in the minds of non-members that will prove its reward.

"The meeting was conducted by Engr. Sacks, whom you all know, and who did an excellent job. (I might say that all the speakers happened to be members of both societies, and indirectly that prevented any adverse action as to sponsoring membership). Perry Ford, spoke from a National standpoint, and although little known to the group in attendance was admired by all for his clean cut and easy way of laying all the facts before his listeners. Next followed Bob Craig, who outlined conditions in Penna. Sam Sacks followed this with typical legal cases, their results and their influence in the future. Harry S. Stanton, Chairman of the Delaware Registration Committee outlined the work he was doing in Delaware, and although Delaware was not 'first' this time he was doing his best that it shall not be last.

"Following these talks a discussion on the subject was led by Engr. Fred Dechant and Col. C. E. Myers. Both brought out many interesting points. Following the meeting, refreshments were served and then many proper questions and discussions transpired. Engr. Conlon also spoke on National legislation and the prospects of the present Congress. All in all I personally think, and I know many others do likewise, that this get-to-gether of the various engineering groups, so that each may better know the other's field of work and dispel the thought 'of just another society' will do well for all. To me it was a grand success, and I am hoping that we shall be able to hold more in the future."

John Farris, past potentate of Syria Temple, who was head of the Farris Engineering firm and the Mausoleum Construction Company, died in his home in the King Edward Apartments, Oakland, Penna.

Mr. Farris, with an older brother, entered the bridge construction business about 20 years ago. He became president of the engineering firm in 1915, a position he held until his death.

Born in Wisconsin, Mr. Farris attended local schools and after a period of teaching graduated in 1909 from the University of Pittsburgh with a degree of civil engineer.

He was a member of the state board of registration for professional engineers and a past president of the Pittsburgh section of the American Society of Civil Engineers. He was a member of Tancred Commandery, Crescent Lodge No. 576, F. & A. M., and for seven years served on the Divan of Syria Temple, A. A. O. N. M. S., and was potentate in 1937.

The following resolution was offered by Engineer H. C. Roeder, Catasauqua, and seconded by Engineer J. B. Walker, Allentown, at a recent meeting of the Lehigh Valley Chapter of the Pennsylvania Society of Professional Engineers comprising Carbon, Lehigh, Monroe and Northampton Counties, in Bethlehem.

"Be It Resolved That After a thorough consideration of the Act of Assembly No. 447, Sections No. 160-163 inclusive, approved May 2, 1929, pertaining to the office of County Surveyor, the Lehigh Valley Chapter, Pennsylvania Society of Professional Engineers is of the opinion that said office is useless and burdensome to the taxpayers of our Commonwealth and such duties now imposed by law on said County Surveyor can and should be discharged by the County Engineer, and the Chapter recommends that suitable action be taken by the Legislature now in session to that end.

Therefore, our Chapter Secretary is hereby authorized to forward a copy of this resolution to all other local Chapter Secretaries, forward copies of same to their Senators and Assemblymen for action by the State Legislature."

WISCONSIN

MEETING OF THE BOARD OF DIRECTORS

Minutes of the meeting of the Board of Directors of the *Engineers' Society of Milwaukee* held on March 15, 1939 at the Pfister Hotel.

In the absence of President George G. Post, Vice President F. A. Kartak called the meeting to order at 5:15 P. M.

Roll call showed the following members present:—F. A. Kartak, vice president; W. R. Mueller, secretary-treasurer. Directors — John D. Ball, H. C. Frey, E. L. Knebes, J. A. Potts, W. J. Thuermann, Adam Ziska Committee Chairmen—F. H. Potter, membership; F. T. Kartak, legislative; G. F. Staal, reception; F. H. Dorner; cooperation with educational institutions and representatives to American Engineering Council. Affiliated Societies:—Wm. E. Crawford, A.I.E.E.; R. C. Newhouse, A.S.M.E.; J. P Gebhard and Lloyd Knapp. A.S.C.E. The following members attended the meeting: Wm. J. Hebard, E. D. Ayres, L. H. Stark, A. G. Behling, A. R. Schmidt, O. A. Kiss, Arthur Simon, L. F. Seybold, A. L. Nowicki, R. L. Filtzer.

MISSOURI

PROMOTING THE PROFESSION

We are immensely pleased to publish the address, "The Engineer in the Public Eye," by our fellow engineer, R. P. (Pat) Cummins. We believe this discussion hits the engineer in the eye with a force that has too long been unused, and we would like to urge Engineer Cummins and others to give more serious thought along this line. More than thought is necessary; it will take expression, both in discussion and in writing, and the Missouri Society is ready to act as a forum for this kind of activity.

If argumentive points are needed to start such a discussion, we want to put in our two cents and say that we believe certain things are wrong and should be corrected. These are our opinions and in no way represent the opinion of the Society as a body.

One of the points that seems to be indicated by the plight of the profession is that we are too free with our knowledge. A little bit of engineering knowledge can be just as dangerous as a meager knowledge of medicine or law. As a profession we allow anyone to read a book or two and then set to work at engineering, calling himself an engineer with no one to say yes or no as to qualifications.

Since we are free with our knowledge and set no standards as to how much is required for competency it is easy for anybody to be an engineer as far as the public is concerned. This leads to the idea that merelv being an engineer means little. Those outstanding engineers who are recognized by the public are not known for their engineering ability; they are known because they are successful administrators, or business men, or inventors, or some special field that might possibly be entered by any person regardless of profession.

The name "engineer," to the layman is applied to the fellows who run locomotives, or cranes, or possibly a transit. As a profession we have made no attempt to explain that the mechanical engineers who work out the problems of the automobile, for instance, must be highly trained and that the problems they solve involve strenuous thought and painstaking application of varied knowledge. The profession has never said a word to the public about the great work of the electrical engineers in making possible the availability of plentiful and cheap power and light. The automobile runs and

the light goes on when the switch is flipped. That the public knows; and apparently, that is all it wants.

For comparison, the medical profession has achieved a recognition that dictates respect. When a person is hurt or sick, he calls a doctor—not just some one who has dressed wounds or put pills in a bottle—he wants a doctor. When a person thinks he has a law suit—he consults a lawyer—not some one who sits around courthouses for jury duty or who has run for elective office—the man wants a lawyer.

This is not so in engineering. When a person or firm decides that a problem needs an engineering answer—the usual procedure is to get anybody that thinks he knows something about it. It, seemingly, is an advantage if the applicant knows just enough to work on the problem and not enough to demand remuneration consistent with the task and the responsibility involved. This has been the case too long.

For the protection of an innocent public the profession must realize that engineering knowledge must be handled with care. We cannot deny the knowledge to any one who wants to learn and we should encourage and help them, but we must set up some means of determining how much knowledge is enough for competent application.

When we have done this, we can begin to promote the profession and educate the public that when engineering problems arise an engineer should be called in to solve them. In the meantime there are many things to be done, just as Engineer Cummins points out. We must unify the profession and make opportunities for popular developments.

HIGHWAY MEN BOOST WORK OF SOCIETY

Annual Convention of Highway Engineers Association at St. Louis

The recent convention of the Missouri Highway Engineers' Association in St. Louis produced several items of interest to the Society. Principal action of the Association in support of the Society was the following resolution:

"Whereas, the Highway Engineers' Association of Missouri realizes the fact that the engineering profession is not generally accorded an equitable place among the other professions by the public, and

"Whereas, it is recognized that this condition obtains largely through the fault of engineers themselves because of their passiveness in public and civic affairs, and,

"Whereas, this condition can be best remedied by concerted action and solidarity of purpose,

"Therefore be it resolved, that this Association recommend to all its members, affiliation with some organization whose scope includes engineers in all branches of the profession and which will exert its efforts toward having the true and professional status of the engineers impressed upon the public."

Also of considerable interest to the Society was the election of three members of the Society to offices in the Association. Engineer Alex Sachs, Kansas City, was elected president; L. W. Fitzpatrick, will serve as a vice-president; and J. J. Corbett will be the new secretary-treasurer.

M. S. P. E. REPRESENTED IN A. S. C. E. WORK

Founder Society Takes Up Important Professional Problems

Members of the Missouri Society of Professional Engineers have been appointed to important posts in the American Society of Civil Engineers for the 1939 program.

Among those noted in "Civil Engineering" for March are as follows:

Engineer R. B. Brooks, Director; and member of Committee on Membership Qualifications and also member of Committee on Professional Objectives.

Engineer W. M. Spann, member of Committee on Local Sections.

Engineer N. T. Veatch, Jr., Chairman of Committee on Juniors.

Engineer John H. Porter, member of Committee on Student Chapters.

Engineer E. E. Howard, member of Committee on Fees.

Engineer E. O. Sweetser, member of Committee on Public Information.

Engineer W. C. E. Becker, member of Committee on Registration of Engineers.

This is a fine representation and the Missouri Society is proud to have the affiliation of these men who are taking such active interest in the affairs of their national technical organization.

HIGHWAY ASSOCIATION BACKS PROPOSED LAW

The following is a resolution passed by the Highway Engineers' Association of Missouri:

WHEREAS, it is understood a bill has been introduced providing for licensing of Engineers practicing in Missouri, and

WHEREAS, this Association unanimously indorses provision of a law of this character,

THEREFORE, be it resolved, that the Legislator introducing the bill, also the Chairman and Committee members of both houses of the Legislature to whom the bill is referred, be informed of the Highway Engineers Association's interest in favorable action on the bill.

Above resolution unanimously adopted at the 32nd Annual meeting of the Association of Highway Engineers of Missouri, at St. Louis, Missouri, February 15, 16 and 17, 1939.

MACON CHAPTER FORMS PERMANENT ORGANIZATION

The engineers of North Central Missouri met in Macon on February 20, and organized a permanent chapter with Engineer O. J. Lamb as president; H. P. Phelan, vice-president; R. J. Kunder, secretary; and B. P. Weintz, treasurer.

The Macon chapter includes the area represented by Division 2 of the Highway Department and the local group promises to be the center of activity for a large number of engineers in both public and private work in the area.

At its second meeting, on February 24, thirty-four engineers attended a get-together dinner and then joined in the mass meeting at the Highway building.

ENGINEERS' CLUB OF JEFFERSON CITY FORMED

At a meeting February 2, the name "Engineers' Club of Jefferson City" was adopted by the members of the chapter and committees were appointed to determine the policies of the club.

Engineer Howard Williams, president of the temporary organization, appointed two committees—one to frame a constitution and by-laws and the other to consider the type and extent of activities that the Club could encourage to the best advantage of the members and the Society.

With a potential membership of over two hundred members, the Club should be the center of a great deal of worthwhile activity and should do much to advance the work of the Society.

AMERICAN SOCIETY OF CIVIL ENGINEERS

Metropolitan Section, American Society of Civil Engineers

Committee on Professional Relations

Fourth Progress Report

This report deals with three topics: 1. Unionization. 2. Legislation. 3. Cooperation.

1. The Supervising Professional Engineers Union.

The N. Y. State Society of Professional Engineers and the New York Building Congress have gone on record in condemning and repudiating the recently formed "Supervising Professional Engineers Union," chartered by the American Federation of Labor. At an open forum called by the Building Congress on January 13, engineers, architechts, builders, and labor united in recording opposition. Representatives of the building trades unions declared that they were opposed to this new "union" and that it has no standing in labor circles. Following an investigation by V. T. Boughton, *Engineering News-Record* published an article exposing the admission of intended use of coercive methods. Various official and private agencies have started investigations of apparent misleading advertisements and misuse of the mails in soliciting members for the union. High initiation fees ($200) and weekly dues ($5) are reported to be solicited by this "union" by holding out prospects of high salaried positions ($4000 to $6500) to be obtained by coercive methods. Edmund J. McCormick, the organizer, is reported to be visiting other cities to establish branches of his union. The State Society of Professional Engineers has accepted McCormick's resignation from a committee designation and has requested his resignation from the Society, in

(Continued on page 23)

The Man We Don't Know

(Continued from page 6)

in the engineers that you find so few of them in the high places. In support of this, may I again mention the Conference of Colleges. In its last convention, they reported that we had 1056 accredited colleges in the United States. Of this number, about 204 are devoted to engineering exclusively. Now, with a little sacrilegious titter they complete this expose and inform us that out of this number of colleges there are but two which can boast of having an engineer for its president. Isn't this illuminating and comforting to all of us engineers? Well, perhaps, it is as it should be, because we have not the cultural background to sit in the driver's seat. But we do recognize it as a handicap. I shall have more to say about these things later. Things, which we as engineers have done and for which very little credit has been given us. We are told, and with truth, that 82% of the men who graduate as engineers are not in engineering at the end of the fifth year removed from their Alma Mater. You will find a substantiation of this in two places. First, in the survey made by the Society of Mechanical Engineering covering a period of nine months and reported in their Journal a few years back. Secondly, in a paper presented before the Society for the Promotion of Engineering Education in December, 1936.

After these young men have been selected by our Educational Board, we bring them in on a two year interneship. We pay them a living wage instead of charging them for tuition in a school of higher education. During the two years of this interneship, we rotate them in periods of one to four months between our various engineering departments; that is, we leave them in a department one, two, three, or four months according to the importance of the department. While they are in these departments, they are given the same projects to develop as any resident engineer of the department might have been given. We have no locked doors for them; but we wish them an opportunity to touch, weigh, and analyze everything that we do so that they may carry on in a bigger and better way when we have passed on. We have a scholastic set-up for them which starts at 3:30 p. m. in the afternoons and which follows the academic year from September to June in two semesters of 18 weeks each. As I enumerate the seven subjects required of them, you will notice that at least four treat of the cultural side of life: advanced engineering, psychology, public speaking, sociology, logic, commercial law, practical applied engineering mathematics, practical applied thermodynamics, and physics are given practical application.

Upon completion of this course, we graduate these young men again with their professional degree. Not unlike the young interne leaving the hospital not with a degree, but with a certificate permitting him to practice his profession. They are then immediately absorbed by some particular department in which both we and they jointly agree their talents fit best. We do not say to this one, or that one, you *must* take up your duties in this or that department, because we want to plug a hole or fill a vacancy. Instead, we say, "Now, Joe, you have been with us two years and you have been through the important departments of the forty-seven individual engineering departments in our engineering division. What have we that intrigues you most?" Joe certainly knows, and naturally he will pick the thing which he likes better than anything else. The fact that he is permitted to do the thing he likes best, he is bound to do a better job than where bread and butter formerly dictated the practice. It is only at the end of two years that we, or Joe, actually know what type of engineering or specialist in engineering he has been fitted for by his Maker. By this I mean, and I am addressing this to you who are about to receive your degree, psychologically, the experimental engineer is not a research engineer, mentally or otherwise. An experimental engineer is invariably a chap who plays around with "a something" which he already has while a research engineer is a chap seeking a new truth hoping to find it. Maybe he will, maybe he won't.

If you were to ask an experimental engineer saying to him, "Joe, suppose I were to do thus and so, what will be the result?" Joe would apply certain fundamental, physical laws and give you a snap judgment answer. He could be either right or wrong. Now, let us ask the former chap, the research type. How might he reply to it? Perhaps but one way, and that is, "I do not know." Anything could happen for him, and it does. He is always looking for the inevitable. He has a very analytical mind. He is an adept at physics. He can look his Maker in the face and say with truth that he loves mathematics better than any subject he ever took. After 40 odd years in engineering and teaching engineering, I can honestly say that few engineers can subscribe to this latter statement with truth. Your reaction to this might be, "Well if he has this background, would he not do a 'whale of a job' as an experimental engineer?" No, boys, he would not, because invariably he is not tool-minded. He cannot do things with his hands. It is pathetic to watch him pull a cotter pin from a something. On the other hand, however, he is the chap who reaches out into infinity and grabs handfuls of her mysteries and after sifting them through careful fingers, "Presto!" he has something new. When he finds that something new, his job is done, Whether he thinks so or not. We know that it is. In the first place, he could not successfully design it. Let us analyze this.

A designing engineer, if he sticks out like a sore thumb, because of this proclivity is as temperamental as the "Old Devil". He is not unlike a high grade musician who never was nor will be a successful orchestra leader. Now what is the success of our successful orchestra leaders? Is it their ability to play instruments? Indeed not. Sousa could write music and do a fine job of it, but he could not play it any too well. On the other hand, he could stand up before a body of men whether orchestra or band with that infectious smile of his that became contagious bring them all with him. Now, hearing a discord here or there, he was not perturbed or annoyed. He stopped, made a correction upon it and by moral persuasion swung along like a symphony of the spheres. Let us substitute Paderewski for Sousa. What do we find here? A different mortal. Paderewski forgot more music than any of this motley crew will ever know; but his soul is so saturated with music that the moment he hears a discord, he wishes to tear his hair out. Here is a man like the designing engineer who contacts better with things than with men. Men irk and irritate this type of man. You cannot take a human being and twist him hither and yon into a doctor, banker, preacher, or engineer at will. God made humans, and I concur with Presbyterianism enough to say that he has pre-ordained each of us to fill a particular niche in life which we can do better than that of something else. When you leave the human equation out of the sphere of things, you are due for a fall. It is in this sphere that W. P. Chrysler, by whose grace I am here tonight, stands out pre-eminent. Now, let us analyze the opposite of this designing engineer.

This chap also leaves his school with high hopes and aspirations, but bread and butter dicate the practice. So he finds a job for himself on the designing board. Being the opposite of a designing engineer, he finds first that he cannot concentrate and he does not like the work. He avers he is going to quit at the very first opportunity. In-

variably, however, the opportune moment never arrives for him. Now, what is the matter with this chap. Nothing! By nature he is a man who would contact better with men than with things. In fact, he is not a designer at all. He may be a good draftsman, but after all one being a good draftsman may be only a stenographer to an engineer. He may not be able to inject any new thought into the project, being just a good copyist. Well after a time, he quits the job; or he is fired. He now seeks new employment. What is he asked? Invariably, "What experience have you had?" "Oh, I have had two years' experience with this or that concern on (left us call it) chassis design". What does the employing agent do about this? Well, he contacts his Chassis Designing Department. If he finds a vacancy there. He returns this man to the same occupation. What has the employing agent done for the draftsman or himself? For the draftsman he has allowed him to change jobs; and as for himself, he has purchased experience that is not worth a snap of one's fingers. So the young draftsman goes on to be a "round peg" in a "square hole" because everytime he seeks new employment he sells himself on his last experience. I could take up your time for the next hour and psychologically analyze why a man fits into a particular line of endeavor or why he does not. However, since many of you might have other aspirations in engineering, let us analyze two types of sales engineers.

We will set up two types, a like and an unlike. The first leaves his Alma Mater with his engineering fundamentals 100% and a strong desire to be a sales engineer, so we will credit him with the things which he has and debit him with the things which he lacks. On the debit side of the ledger we find that, first he lacks a personality. Now, the person who lacks a personality cannot sell himself. He who cannot sell himself cannot sell his services, ideas, or commodities of others. What a personality is, I do not know. I have no definition for it. Webster has but I find it to be very inadequate. On the other hand, we must admit there are certain humans for whom nature has written a letter of credit which seems to be redeemable at its face value wherever presented; or it may be the summation of one's experiences into wit, wisdom, and understanding. But whatever it is there is a subtle something about certain folks that makes us always wish to be with them; and others if we never saw them again, it will be soon enough. This chap lacks, besides a personality, the background of a good cultural education which would give him carriage, poise, approach, and attack.

Now, let us assume that he makes a contact as a sales engineer. He is required to contact some individual in some distant city. He arrives in the individual's office, who looks him over as he approaches, and thinks: What is this chap coming to see me for? Why, he is here to take something from my pocket? Thus does the individual, who is the interviewer, soliloquize. You know when two strangers meet, there is bound to be resistance; and right here begins a battle of wits. The personality of the one is bound to predominate the other. Now, this young man lacks the qualifications and other measuring sticks, which would be helpful in the evaluation of the human equation. He is imbued with one idea, and that is to tell this individual, as he terms it, "plenty". He starts in, perhaps, to talk, and talk, and talk some more. The more he talks. The more he aggravates and irritates his interviewer. Finally, the interviewer terminates the meeting abruptly by saying "NO"; and remember, boys, once you allow a human being to say no very rarely does he recant or retract. So the young sales engineer is returning, murmuring against fate, while it was a crime to have sent him at all.

Now, let us take the opposite of this young man. This other boy has his engineering fundamentals only half as well as the other fellow, but nature has endowed him with a fairly good personality. Now, you cannot build a mansion on a shack foundation; and we must admit that a diamond from the field is a crude looking stone. We are obliged to hold it in a certain position in order to get a gleam from it; however, when the diamond cutter is through with it, the facets gleam at us from whatever position. This a just as true of the human. The chap we are about to discuss has been taught some of the cultural measuring sticks of life. He has been given mediums of evaluating humans. His approach might be like this: He is not concerned with what he tells the interviewer until he arrives in his office. The state of mind of the interviewer will have a lot to do with what he says and how he says it. He may not be able to get the interviewer to concentrate. Now, if a man will not concentrate, you had better have sense enough to call your meeting off. Now, this latter chap senses this condition. So he will tell the interviewer very little about the business at hand; but he will attach to the things which he tells him a personal magnetism so that this man will think about him today and tomorrow. He will leave him long before he says no, and with a string to it that he is coming back. Is it not logical that this interviewer may be glad to see the latter chap come back while the previous one, if he never came back, it would be soon enough?

This is why the Chrysler Corporation has an interneship in engineering. Because in the lifetime of no one engineer could he acquire all the ramifications in the design of a motor car. Not unlike their colleagues, the doctors, who became specialists, these engineers of ours became specialists, not in engine design but in the things they can do to make an engine operate more successfully. He may be a carburetor engineer, crank shaft engineer, combustion chamber engineer, transmission engineer, and then when he is ready to lay down his life still be in a position to admit that in his lifetime he never acquired all the known truths about the particular thing in which he specialized. If this be true of automotive engineering, it is just as true of any other field of engineering whether we are designing locomotives, or the right-of-ways that carry them, or the bridges which span our rivers or harbors, or the mining engineers who delve for nature's riches.

Does this pay? Our corporation feels that it does. Other industrialists might not look upon this in the same light because too many industrialists are better bookkeepers than engineers. They are all for education in engineering so long as the goose hangs high, but as soon as a cloud appears on the economic horizon the first thing that is either drastically cut or wiped out entirely is education, and engineering is too frequently reduced to a point where it is a name only. But after all, folks, engineering is the insurance policy that tells industry what they can do when they can't do the thing they are doing now. Our Mr. Chrysler, however, is not in this latter class. To him education in engineering is his bread and butter. In fact, he once said that our graduate school in engineering was the bread and butter upon which not only his employees but executives as well, depended. For says he, "Sales Departments can have nothing to sell until it is engineered and their ability to sell it is dependent upon how much better it is engineered than their competitors' products." This in turn then throws the whole problem into the lap of the engineering division and as this division is made up of our young men from the interneship school, there rests the crux of the whole problem.

Now you young men are leaving this school tonight, ready to enter industry tomorrow, if they accept you; and if you are the right type, they will be looking for you. Too many of you will say, "There are no frontiers any more, pioneers are all dead, the forests all felled, the highways are all laid. What is there for me to do?"

(Continued in June issue)

Planning and the Professional Engineer

(Continued from page 7)

Engineer" as expressed in Section 2, Act of Assembly No. 415 (Registration Law for Engineers and Surveyors): "Definitions.—The term 'professional engineer', as used in this act, shall mean a person who through technical knowledge gained by education or by experience in one or more branches of engineering, including surveying, initiates, investigates, plans, and directs *the control of the forces of and the utilization of the materials of nature, and human activities in connection therewith, for the benefit of man*, and who represents himself or herself to be such a professional engineer, either through the use of the term "professional engineer," with or without qualifying adjectives, or through the use of some other title implying that he or she is such a professional engineer," we see this same principle. Here again the value of engineering to city and regional planning is self evident. This statement does not exclude the necessity for use of other professions, but a recognition of the fact that insofar as the use, control and utilization of the forces of nature are concerned the Engineer stands preeminent. Any body which proposes to deal with these factors without the use of engineers, is not working in the public interest from the point of view of using those most fit for this purpose and further are at variance with the laws of this state and of more than forty of the other states of these United States.

To continue the second paragraph of Section 2 of Act 415: "The term 'surveyor,' as used in this act, shall mean any person engaged in that branch of engineering known as 'surveying,' who makes surveys for the determination of area, or for the establishment or re-establishment of land boundaries, or the subdivision and platting of land, who makes surveys for the establishment of lines or grades or elevations for carrying out engineering work including the preparation of plans or specifications for minor engineering work not involving safety to life, and who determines quantities, or who makes estimates for proposed work, or for work under construction, or work that is completed, or who, in addition to the foregoing, makes estimates of quantities of mineral or minerals in place or that have been removed." You will note these phrases, "who makes surveys for the determination of area or for the establishment or re-establishment of land boundaries, or the subdivision and platting of land, who makes surveys for the establishment of lines or grades or elevations, for carrying out engineering work including the preparation of plans or specifications for minor engineering work *not involving safety to life,"*. Here it is *"not involving safety to life"* in other words, the measure of criteria is the Police Power. Those things enumerated when practiced not in conformity with the Police Power are to be considered in the realm of the surveyor and the others the province of the engineer as a part of surveying and is so stated in the first paragraph of Section 2. This brings us face to face with the limits of the surveyor province as defined by law in its approach to engineering. The measure is the criterion of the police power. In this connection it appears that if those surveying operations which are a part of the City and Regional Planning procedures do not conform to this criterion in the case of first instance as being performed by a registered engineer, it does not conform in the second instance as being a legal action of a City or Regional planning body.

It is believed this theory will be found correct and based on the criterion which measures the police power. It is to be understood the professional license laws are based on the same procedure to gain the police power of the state.

The employment of the professions in private industry and here I speak particularly of engineers, is predicated on the same theory. Where the police power is involved, that is in order to safeguard life, health and property, those persons in responsible charge of engineering operations, by law, must be registered.

There seems to be a rather general opinion that the second paragraph of section 1 of the act concerning the practice of the profession of engineering "in any of its branches, including surveying, by any person, firm, copartnership or corporation, upon property owned or leased by such person, firm, copartnership or corporation," means such a person practicing does not need to be registered. The last phrase of this paragraph should be particularly noted: *"unless the same affects the public safety or health or the property of any other person, firm, copartnership or corporation."* This places the practice of the profession of engineering as defined in law, in private industry on the same basis as in public work. The basis is the same in both issues, that is, the exercise of the police power of the state. In fact, the factor in all cases to determine whether engineering as defined by law is practiced is not *where* it is practiced; but what the practice involves, namely "safeguarding life, health and property of other persons, etc."

New York State Society has Annual Spring Meeting

(Continued from page 11)

Loomis, newly appointed Assistant Commissioner for Higher Education, who expressed himself as delighted to cooperate in the objectives of a profession whose aims were clearly set forth as indicated in the published manual of the Society.

The meeting was addressed by Matthew O. Troy, Vice-President of the General Electric Company, who spoke on the Value of Engineers and Their Contribution to Civilization.

Engineer McDonald of the practice violations committee pleaded with the Society to have the Department of Education complete its investigation of the reputed illegal practice of the profession in Erie County.

Reports were made by the following county chapter presidents:

Engineers Kohl of Rochester, Ketchum of Hornell, Archtander of the Bronx, Cheney of Salamanca, Fairman of Brooklyn, Perry of Binghamton, Malkmus of Lynbrook, Hager of Niagara Falls, Pearce of Poughkeepsie, Cook of Long Island, Sullivan of Glens Falls, Robbins of Troy, Welsh of Staten Island, Brady of White Plains, Dollard of Syracuse, Chadsey of Schenectady, Felch of Newburgh, George of Albany, Bruns of Jamaica, and Scanlon of Buffalo.

All of the zone directors gave an accounting of the activities of their localities. It was found that each of the chapters were in a sound financial condition, prepared to promote and defend the profession.

Resolutions were presented petitioning the Society to consider an amendment to its by-laws so as to provide for the retention of members in county chapters who had been retired from active engineering employment and who were, prior thereto, members of the chapter for at least five years.

Another petitioning the Society to create a memorial to the memory of Engineer Arnold G. Chapman and suggesting that said memorial be a scholarship at Union College, where Engineer Chapman matriculated.

Also one petitioning that the services of an auditing firm be engaged to examine the books and minutes of the organization for the year of 1938.

Invitations were presented to the Society by the munici-

pal officers by the cities of Rochester and Niagara Falls, requesting the Society to hold its fall meeting in either of these municipalities. The petition was referred to the Executive Board.

The president reported that a high degree of cordiality exists between the Society and the Department of Education, charged with the administration of the law affecting the profession, remarking that the department has created a new service to the professions in the engagement of a secretarial staff to ferret out and serve the professions where alleged illegal practice is reported.

The action of the president and the board in conducting the affairs of the Society was ratified and approved by the membership.

ALFRED E. ROCHE, *President* — W. A. STUBBS, *Secretary*

American Society of Civil Engineers

(Continued from page 19)

addition to advising him to discontinue his union operations. The newspapers that carried his original "Help Wanted—Male" advertisements are conducting an investigation and have discontinued the advertisement. The organization of this union has every semblance of being a racket, besides hurting the standing of the profession. Henry Earle Riggs, Past President Am. Soc. C. E., has written to President Alfred E. Roche enthusiastically congratulating him on the stand the State Society of Professional Engineers has taken in this matter.

RECOMMENDATIONS: 1. That the Metropolitan Section Am. Soc. C. E. go on record as opposing the formation of the Supervising Professional Engineers Union.

2. That the other Local Sections of the Am. Soc. C. E. be invited to take similar action.

2. Legislation at Albany.

BILLS TO BE OPPOSED:

1. Bill to prohibit or restrict the engagement of architechts and consulting engineers on public work. (Senate Bill Int. 22, Print No. 22, by Senator Phelps. Referred to the Senate Committee on Civil Service). This bill is similar to the McNaboe bills which were opposed and defeated last year and the year before. It is sponsored by the Civil Service Guild. This type of legislation is highly objectionable as disruptive class legislation seeking to obtain a selfish monopolistic advantage for one group in the profession at the expense of another. It is contrary to the public interest and to the best interests of the profession as a whole. Vigorous opposition by all professional organizations should be continued.

2. Bill to prohibit all civil service commissions from setting up any educational standards or giving any credit for education. (Senate Int. 23, Print No. 23, referred to the Senate Committee on Civil Service; and Assembly Int. 28, Print No. 28, referred to the Assembly Civil Service Committee). A similar bill last year was opposed by the Metropolitan Section A. S. C. E. and by the State Society of Professional Engineers, and was vetoed by the Governor. This legislation would be disastrous to civil service standards. It is based on the fallacy that an examination can take the place of the full value of education. The bill would deprive the civil service commissions of powers which every examining body has and needs in maintaining high standards. The New York Municipal Civil Service Commission is opposed to this legislation and has requested immediate recording of protest by the Am. Soc. C. E.

RECOMMENDATIONS: 1. That the Metropolitan Section Am. Soc. C. E. continue its recorded opposition to the above-described legislative measures.

2. That the Metropolitan Section recommend similar action by the other Local Sections of the A. S. C. E. in New York State and by all other interested professional organizations.

(Note: Opposition to both measures should be recorded by writing or wiring to Senator Karl K. Bechtold, Chairman of the Senate Committee on Civil Service, and to Assemblyman Emerson D. Fite, Chairman of the Assembly Civil Service Committee).

3. Cooperation with Other Local Sections.

As a procedure for exchange of information and unity of action with other local sections of the Am. Soc. C. E., this Committee on Professional Relations of the Metropolitan Section has been transmitting copies of all of its monthly reports to the other local sections in New York State, as follows: Rochester, Syracuse, Buffalo, Ithaca and Mohawk-Hudson. Appreciative acknowledgements have been received from the Rochester and Ithaca Sections.

RECOMMENDATIONS: 1. That this procedure be continued and that the other Local sections be invited to reciprocate.

2. That the Metropolitan Section recommend to the other Local sections that they also subscribe to the legislative information service of the State Society of Professional Engineers, to which the Metropolitan Section has subscribed $250.

CHAPTER MEETING

A very common activity of individuals is to join something, attend one or two meetings, and then disappear. Their names continue on the membership lists, they pay their dues, and occasionally attend a special function of the organization. This is a condition with which every one is familiar, and happens in religious, business, social and all the types of clubs, societies, and organizations that might be mentioned.

There are many reasons why people like to be associated with a specific organization, yet do not attend its meetings, particularly its regularly stated meetings. Most of these reasons are good reasons. The questions of time, business, family, other activities are all just, and do not come under the head of alibis. With a great many types of societies, it is not particularly necessary or important that the members attend many meetings. The technical engineering societies are a good example of these; the principal function of these societies being the disseminating of technical information, which can be done very well by correspondence.

In the case of the Professional Engineers Societies, it seems that personal attendance at meetings is of some importance. The chief objective of these Societies is the promotion of the engineers' business affairs; and these affairs cannot wait on leisurely correspondence. Many of the points require verbal presentation, always a more forceful method than the written word. So much remains to be accomplished of the Society's program that the thoughts of all members, and not just a few, are required to keep the program moving. What better place to present those thoughts than on the floor of the meetings, where all can hear and augment or modify as seems best.

Sometimes the complaint is heard that those in charge belittle or disregard the ideas of those not in the cabal. Sometimes such complaints are justified. There is always a mandate to elected officials to be as democratic as possible in their administration of affairs. Of necessity those who have been selected to the positions of importance must make the final decisions, and very often these decisions will be adverse to the proponents of particular ideas. But this is not very remarkable; practically everything that is done by people working in groups is by compromise, with those on either extreme having to give much toward the others' point of view. That an idea may be defeated by vote, or modified by debate, is no reason why it should not be presented.

The best way to present your ideas is in person—at the meetings.

MARTIN C. KNABE.
of the Pittsburgh Society of Professional Engineers

GUESTS FROM FRANCE

(Translation of letter addressed to Mr. Sacks by President Fournier under date of March 1, 1939)

Mr. Samuel I. Sacks, C. E.
921 Widener Bldg.,
Philadelphia, Pa., U. S. A.
Dear Sir:

I have the pleasure to confirm an understanding which took place at our meeting during the time of the Exposition in Paris in 1937 and to recall to you our promise to return your visit at the time of your Exposition in 1939.

Personally, it is impossible for me at the time to leave my country but a very good friend and highly regarded colleague has agreed to represent our Society.

I hope, therefore, that you will extend a cordial welcome to Mr. Maurice Hylaire, Engineer, Administrator-Director of the Normandy Works of Fecamp, Vice-President of our Society, who has been designated to represent us at the time of his visit to your Exposition.

We shall be very happy to know:

1. Is it wholly agreeable to you to receive representatives of our Society?

2. At what time would you prefer to have this visit take place?

3. Would it be possible to forward to us a brochure relative to your Exposition?

We have transmitted to you a copy of each issue of our new Revue *La Science Appliquee.*

Please accept, my dear Mr. Sacks, the expression of my best wishes.

The President,
FOURNIER.

OPEN FORUM

Federal Department of Public Works

Col. M. E. Gilmore,
166 East 96th Street,
New York City.
Dear Col. Gilmore:

I have received from Engr. Willard S. Conlon, Secretary of the National Society of Professional Engineers, copies of three of the bills to which you referred bearing directly or indirectly on the subject of a Department of Public Works. I have read these bills and submit the following brief comments:

S. 1265. By Senator Byrnes. This is a bill to establish a Department of Public Works, at least so far as Title I is concerned. I believe this bill would more directly accomplish your objective than any of the other legislation currently under consideration. As you pointed out, however, the proposal in this bill is encumbered by including the Civilian Conservation Corps and the National Youth Administration as activities to be taken over by the proposed new Department of Public Works. A clearer distinction undoubtedly should be drawn between public works and relief agencies. On the whole, however, I feel that S. 1265 should be supported by the engineering profession.

S. 1706. By Senator Byrd. This is a bill to provide for reorganizing agencies of the Government. It is not quite clear to me after reading this bill whether it would make it possible for the President under this authorization to recommend the establishment of a Department of Public Works, since the bill specifically excludes the creation or establishment of any new executive agencies to exercise any new functions.

H. R. 4576. By Representative Starnes. This is essentially a bill for the continuation of the Public Works Administration. Although this is not directly a proposal for the establishment of a Department of Public Works, I believe that this bill should also be supported and endorsed by our profession. I am particularly impressed by one new feature in this bill, namely the provision for making grants to public agencies for the preparation of plans and specifications for projects. The absence of such provision has been one of the weak points in the past set-up of the Public Works Administration, making it necessary in most cases for engineers to gamble on the preparation of plans and specifications and other preliminary expenses, with a consequent sacrifice of both professional and technical standards.

I shall be glad to have your comments and notations on the three bills enumerated above as well as on any other pending legislation that may be relevant, and I shall look forward to hearing from you.

Faithfully yours,
D. G. STEINMAN.

"KEEP THE DOOR OPEN"

Editor,
Engineering News-Record,
330 West 42 Street,
New York City.
Dear Sir:

In your editorial under the caption "Keep the Door Open" in your March 16 issue, you comment on a proposed amendment to the Engineers' license law in N. Y. State. Permit me to point out the following pertinent facts:

1. The proposed amendment was not intended to add any mandatory requirement. The present law, by the same appearances, could be represented as making it mandatory for every candidate to be a graduate of an accredited engineering school, if we overlook a subsequent clause which states "In lieu of such graduation, an applicant may be admitted . . ." Similar customary legal construction is followed in the proposed amendment. The same Board of Examiners that applies the present law to "Keep the Door Open" to men who never had any formal schooling at all can safely be trusted, under the proposed amendment, not to close the door to men who have not had the benefit of six years of college education.

2. The objective of a professional licensing law is not mere "ability to design safe structures." *Public welfare* should be considered, beyond the narrow limitation of safety of life, health, and property. In the words of a resolution adopted by the National Society of Professional Engineers: "The highest interests of public welfare and safety are not best served by men whose schooling has been confined to the technical without the development of social perspective, character and intellectual breadth through an adequate foundation of liberal and cultural education."

3. You conclude your editorial with the oft-repeated thought that the measure of a man's ability "should not be how or where he obtained his training but what he knows when he comes to the license board for examination." I submit that no examination thus far devised can be a full measure of professional qualifications, nor can it replace or test the full value of a well-rounded professional and technical education and of the subsequent maturing through practical experience. I know that opinions differ on this subject, but I believe that most of the leaders of the profession would refuse to accept examinations as the all-sufficient requirement.

In conclusion, permit me to make it clear that I personally, as one who came from poverty, want to "Keep the Door Open" for the poorest boy of high aptitude and ambition to secure education and attain admission to the engineering profession. This however is not inconsistent with my desire to offer every possible inducement, in partial compensation, to encourage prospective engineers, to the extent of their resources and abilities, to equip themselves with a better-rounded and more complete education in preparation for their professional life-work.

Faithfully yours,
D. G. STEINMAN.

CONTRIBUTIONS PLEASE!

The Society desires State officers to send to the Editor at Harrisburg, Pennsylvania, all news of State activities of general interest or of special interest to the Society.

We are especially anxious to have the middle west and western State Societies have as prominent a place in the magazine as the eastern State Societies have had.

The western societies are newer, and may be reluctant, but we assure them that we will be glad to use all of value they send to us.

We also welcome articles from individual members on professional subjects.

THE EDITOR.

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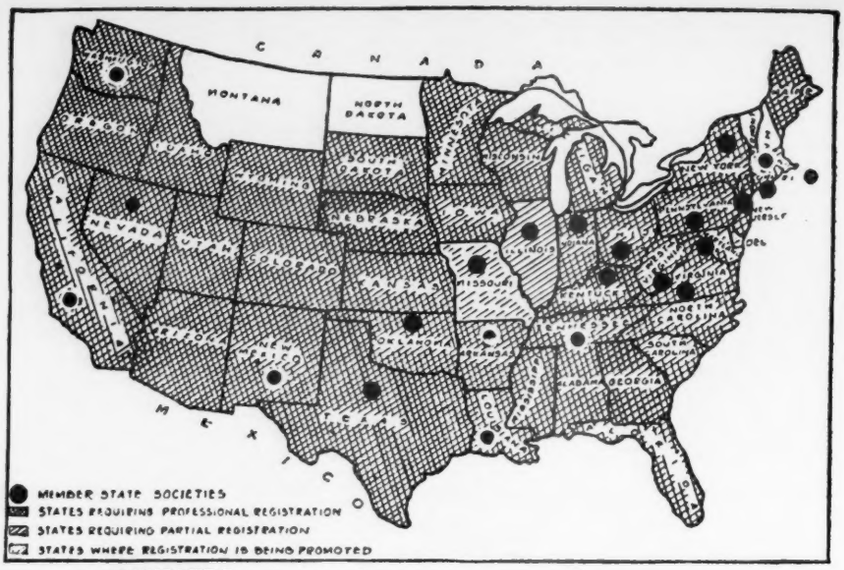

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